

Coille Linne Wind Farm

Further Environmental Information (FEI) Volume I: Written Statement

June 2026

CONTENTS

1	INTRODUCTION	1-3
	Structure of the FEI	1-4
	Contact for Further Information	1-5
2	FEI APPROACH	2-6
3	NEED FOR FEI	ERROR! BOOKMARK NOT DEFINED.
4	THE REVISED DEVELOPMENT	2-7
	Introduction	3-8
	Consultation	3-8
	Design Evolution & Extent of Change	Error! Bookmark not defined.
	Description of the Revised Development	Error! Bookmark not defined.
	Further Information Regarding Key Components	Error! Bookmark not defined.
	Balancing Constraints with Need for Efficient Generation	Error! Bookmark not defined.
5	GRID CONNECTION ROUTE	4-11
6	LANDSCAPE & VISUAL IMPACT ASSESSMENT	ERROR! BOOKMARK NOT DEFINED.
	Introduction	Error! Bookmark not defined.
7	CULTURAL HERITAGE & ARCHAEOLOGY	5-17
	Legislation and Policy Context	Error! Bookmark not defined.
	Consultation Responses	41
	Assessment Methodology and Significance Criteria	Error! Bookmark not defined.
	Baseline Conditions	41
	Identification and the Evaluation of Key Impacts	41
	Cumulative Effects and Interaction of Effects	Error! Bookmark not defined.
	Mitigation	Error! Bookmark not defined.
	Residual Impacts	Error! Bookmark not defined.
	Summary (comparison of Revised Development Vs EIA effects)	42
	References	Error! Bookmark not defined.
8	ECOLOGY	8-43
	Introduction	8-43
	Key Conclusions of the EIA	8-43
	Consultation	8-43
	Assessment of Effects Update	8-43
	Summary	8-43
9	ORNITHOLOGY	9-44
	Introduction	9-44
	Key Conclusions of the EIAR	9-44
	Baseline conditions	9-44
	Legislation, Policy and Guidance	9-44
	Assessment Methodology and Significance Criteria	9-44
	Consultation	9-44
	Assessment of Effects and Mitigation	9-44
	Summary	9-45

10	GEOLOGY, HYDROGEOLOGY & HYDROLOGY	10-46
10.1	Introduction.....	10-46
10.2	Subsequent Design Changes and Additional Baseline Survey.....	10-46
10.3	Methodology	10-48
10.4	Scope of Assessment	10-48
10.5	Baseline Conditions and Sensitivity Assessment	10-48
10.6	Impact Assessment	10-50
10.7	Summary.....	10-53
10.8	Statement of Significance	10-53
10.9	References	10-53
11	NOISE	11-56
	Introduction	11-56
	Summary	11-59
12	TRAFFIC & TRANSPORT	12-61
	Introduction	12-61
	Key Conclusions of the EIA	12-61
	Consultation	12-61
	Assessment of Effects Update	12-61
13	SOCIOECONOMICS & TOURISM	13-63
	Introduction	13-63
	Assessment of Effects Update	13-63
14	FORESTRY	14-64
	Introduction	14-64
	Legislation, Policy and Guidance	14-64
	Consultation	14-66
	Assessment Methodology and Significance.....	14-68
	Baseline Conditions	14-73
	Identification and Evaluation of Key Effects	14-74
	Mitigation Measures and Monitoring	14-75
	Cumulative Effects	14-76
	Residual Effects	14-76
	Summary	14-77
	References.....	14-79
15	OTHER ISSUES	14-80
	Introduction	14-80
	Key Conclusions of the EIAR.....	14-80
	Consultation	14-80
	Assessment of Effects Update	14-80

Volume 1 Written Text

Volume 2 Figures

Volume 3 Technical Appendices

1 INTRODUCTION

- 1.1 This Further Environmental Information ('FEI') is submitted in support of a planning application made in June 2025 to the Energy Consents Unit (ECU) under reference number ECU00005163 ('the original application').
- 1.2 The original application was made by Energiekontor UK Ltd ('the Applicant') to The Energy Consents Unit for a generating station consisting of the erection, operation and subsequent decommissioning of up to 15 wind turbines (blade tip height up to 250m) and associated infrastructure on land 21.9km north-west of Lairg and 16km south-east of Altnaharra. It is likely the wind farm would provide approximately 108MW of generating capacity with an additional 5MW of battery energy storage. The name was originally proposed as Fiag Wind Farm but is now known as Coille Linne Wind Farm. The planning application was accompanied by an Environmental Impact Assessment Report ('EIAR') as required under Section 36 of the Electricity Act 1989.
- 1.3 This FEI incorporates a revised Proposed Development that relocates two of the proposed turbines, Turbine 3 and Turbine 5, reduces the tip height of all turbines, and relocated the access track "south option" at T15 ('the Revised Development'). The planning application boundary associated with the Revised Development remains the same as that submitted by the Proposed Development. Further information regarding the Proposed Development submitted under this FEI submission is provided in Chapter 3 of this report.
- 1.4 Throughout the entirety of the application determination process the Applicant has reviewed comments received from consultees, stakeholders, and members of the public regarding the Proposed Development. Discussions with THC raised concerns with the visual impact of tip heights from some sensitive locations. This FEI seeks to deliver the extent of reductions requested by THC and provide details of the likely grid connection route associated with the wind farm.
- 1.5 This FEI provides further information regarding the Revised Development and sets out relevant technical information regarding the associated magnitude of change, focusing on any differences between impacts originally assessed within the EIAR and potential effects introduced by the Revised Development. Any design changes have the potential to affect the conclusions of the EIAR, therefore the assessment of each technical topic within the EIAR and the assessment has been updated if required. This FEI does not seek to repeat the text of the EIAR where this remains relevant to the application and as such the reader is referred to the EIAR where appropriate.
- 1.6 Given there is no statutory guidance on the content of Further or Supplementary Environmental Information, guidance within the Environmental Impact Assessment Handbook (SNH, 5th Edition, 2018) under sections D7 and D8 is relevant. Paragraph D8.3 of the Handbook suggests that the supplementary EIA Report may include a revision of the whole or part of the original document or additions that are needed to cover the additional information, and that a supplementary EIA Report should make clear which parts of the original EIA Report are being supplemented or revised.

- 1.7 This document therefore considers and assesses potential changes to the EIA Report submitted previously, with a focus on potential changes to likely significant effects as required by the EIA Regulations. Given the nature of updated information, not all chapters have required to be updated. Therefore, the assessments, whilst numerical in their order, only contain the information which has required new or revised assessment. This is the case for all volumes, and therefore there may appear to be 'gaps' within the submission where sections of the EIAR not discussed in this FEI remain current and relevant. For consistency, all methodology and terminology used in this FEI reflect that used in the EIAR.

Structure of the FEI

- 1.8 The FEI supplements the findings of the EIAR by describing the Revised Development and focuses on any changes to the likely effects which may result. Unless otherwise stated, mitigation measures proposed within the EIAR remain relevant to the Revised Development. Where the nature of potential effects remains the same as that assessed within the EIAR, this is stated, and the reader is referred to the findings of the EIAR accordingly.
- 1.9 This FEI consists of the following volumes:
- Volume I: FEI Written Statement;
 - Volume II: Figures and Visualisations; and
 - Volume III: Technical Appendices.
- 1.10 This Written Statement is structured around the chapters and appendices outlined in Table 1.1 below, in accordance with the structure and layout of the EIAR submitted.

Table 1.1: FEI Structure

Chapter	Description	Supporting Documents
Chapter 1	Introduction, context and approach to FEI and consultation	
Chapter 2	FEI Approach	
Chapter 3	Need For Further Environmental Information	
Chapter 4	The Revised Development	Figure 4.1 – Revised Development Layout
Chapter 5	Grid Connection Appraisal	FEI Volume II – Figure 5.1
Chapter 6	Update of LVIA	FEI Volume I, II, III
Chapter 7	Cultural Heritage	
Chapter 8	Update of Ecology	FEI Volume I
Chapter 9	Update of Ornithology	FEI Volume I & III
Chapter 10	Geology, Hydrogeology and Hydrology Assessment	FEI Volume I, II, III
Chapter 11	Noise	FEI Volume I

Chapter 12	Traffic and Transport	
Chapter 13	Socio Economics	
Chapter 14	Forestry	FEI Volume II
Chapter 15	Other Issues	

Contact for Further Information

- 1.11 Copies of the full EIA Report and its associated standalone documents can be found on the Energy Consents Unit website by searching for Fiag Wind Farm. In addition, updates including a link to the case file are provided at the following web address: <https://energiekontor.co.uk/our-projects/coillelinne-wind-farm>
- 1.12 Alternatively, the Project Manager can be contacted for copies, as appropriate. There is no charge for provision of electronic documents or hard copies of the Non-Technical Summary on request.
- 1.13 Requests should be made to Calum Morris, Project Manager, Energiekontor UK Ltd, calum.morris@energiekontor.com
- 1.14 Any representations to the application may be submitted:
- via the Energy Consents Unit website at: www.energyconsents.scot/Register.aspx;
 - by email to the Scottish Government Energy Consents Unit mailbox at representations@gov.scot; or
 - by post to the Scottish Government, Energy Consents Unit, 4th Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU.

2 FEI APPROACH

- 2.1 The Revised Development seeks to introduce changes to the Proposed Development that retains the fifteen turbine scheme, with six turbines at a maximum of 230m to tip and nine at a maximum of 200m to blade tip. With the exception of turbines 3 and 5, all turbine locations remain as previously proposed. Turbines 3 and turbine 5 have been relocated slightly further down hill in AOD (m) to further reduce visual impacts. Further information regarding the specific elements associated with the Revised Development are detailed in Chapter 3 of this Written Statement.
- 2.2 The scope of this FEI was carefully considered and focuses on the nature and magnitude of any potential change to the findings of the EIAR. The FEI therefore focuses on updating any findings of the EIAR that would be subject to changes in baseline or the outcomes of the assessment presented in the EIAR. As a result, this FEI focuses on the following EIAR topics:
- **Update to Chapter 6: Landscape and Visual**, including relevant photomontages, visualisations, and appendices in line with consultation (see Chapter 4 for details), as a result of revised substation and tip height decreases proposed;
 - **Update to Chapter 9: Ornithology**, in order to explore any changes to the EIAR assessment in light of collision risk modelling on different turbines;
 - **Update to Chapter 10: Noise**, to assess any changes to predicted noise levels (individual and cumulative) introduced by the amendments proposed; and
 - **Update to Chapter 14: Forestry**, to assess any changes to forestry as a result of the relocation of turbines 3 and 5.
- 2.3 Where assessment updates are not provided for the remaining EIAR chapters the findings of the EIAR remain valid and relevant to the Revised Development. Each EIAR section does however have a corresponding section within this FEI to provide an update on the specific technical discipline, summarising the findings of the EIAR and any relevant consultation responses to-date before outlining whether there is indeed any change to the assessment of effects introduced by the Revised Development.
- 2.4 As there are no statutory provisions on the format and content of FEI assessments, the principles of EIA remain applicable, whereby worst-case effects are reported and assessed. Each chapter within this Written Statement should be read as a complementary chapter to the EIAR and the content of the EIAR is not repeated in full. Instead, where technical assessments remain the same as that assessed within the EIAR, a brief statement is provided to clarify this.
- 2.5 Where the EIAR assessment has changed as a result of the Revised Development, an assessment has been undertaken by the relevant technical team, with the findings reported within this FEI. The level of assessment provided in each case is subject to professional opinion and judgement of the author. Each chapter defines the role of any consultation comments relevant to the specific technical topic, and in circumstances

where a specific issue or query has been addressed further information is provided regarding this.

3 NEED FOR FURTHER ENVIRONMENTAL INFORMATION

Introduction

- 3.1 This chapter provides a detailed description of the need for the changes proposed by the Revised Development, including specific information. This chapter also provides an overview of the consultation responses received to-date during the determination process from THC and statutory consultees which have led to the changes proposed within the Revised Development.

Consultation

- 3.2 Table 3.1 sets out a summary of the consultation responses received in response to the EIAR and also provides a summary of the action taken to address any specific comments, alongside where further information can be found within this FEI. For reference, consultation responses specific to a technical chapter are repeated under the relevant section of this Written Statement.
- 3.3 The Revised Development has been refined in order to address consultee comments and provide additional evidence that the Revised Development appropriately mitigates potential adverse effects.
- 3.4 Where it is not possible to embed mitigation into the design appropriate mitigation measures have been set out relevant to each technical topic in the EIAR and in circumstances where a change to mitigation is proposed from that outlined in the EIAR, suitable information is provided in each technical section of this Written Statement.

Table 3.1: Summary of Consultation Responses

Topic	Consultee	Status	Comment	Action Taken / Where Addressed within this FEI
Hydrology	Scottish Water	No objection	N/A	No further action required
Traffic & Transport	THC Roads	No objection	Conditions suggested	No further action required
	Transport	No Objection	Conditions suggested	No further action required
Planning	THC Development Plans	No objection	N/A	No further action required
Hydrology and Peat	SEPA	Holding Objection now removed	Conditions suggested	Relocation of "Option 2" south track to T15. Relocation of turning head north of T15 addressed in Chapter 10 and

Topic	Consultee	Status	Comment	Action Taken / Where Addressed within this FEI
				Technical Appendices.
Cultural Heritage	THC Historic Environment Team – Archaeology	No objection	Conditions suggested	No further action required.
Aviation	MOD	No objection	N/A	No further action required.
Cultural Heritage	Historic Environment Scotland	No objection	N/A	No further action required.
Ornithology	RSPB	No objection	Conditions suggested	No further action required.
Forestry	THC Forestry Officer	No objection.	N/A	No further action required.
Landscape and Visual	THC Landscape	Comments regarding the potential impacts of the Proposed Development on the Dornoch Firth NSA.	Discussions have taken place with THC regarding the layout of the Proposed Development and it was agreed that a revised scheme should be supported. The Revised Development proposed by this FEI seeks to mitigate the landscape concerns raised in this response and reduce the levels of effect associated from views from the east - Ben Klibreck and Loch Choire LLA, and from the west, Assynt - Coigach NSA.	Updated Landscape and Visual Assessment (Chapter 4) and associated Technical Appendices.
Ecology & Ornithology	NatureScot	No Objection	N/A	No further action required.
Landscape & Visual		No Objection	N/A	Updated Landscape and Visual Assessment (Chapter 4) and associated Technical Appendices.
Peat		No objection	N/A	No further action required.

3.5 As a result of the feedback noted in Table 4.1 the Applicant has engaged further with THC regarding requests for further information and/or objections to the Proposed Development. Following receipt of the THC Landscape response the Applicant sought to discuss potential revisions to the Proposed Development with THC, specifically to address

impacts of views of the wind farm from the Assyny Coigach NSA and the Ben Kilbreck and Loch Choire LLA, in order to address specific points raised within the comments as noted. Following further feedback and consultation with planning officers and the councils landscape architect, the Applicant has taken the decision to further amend the Proposed Development resulting in the Revised Development that forms the basis for this FEI.

- 3.6 The submission of this FEI will enact a separate advertising and consultation process based on the Revised Development.

4 THE REVISED DEVELOPMENT

Introduction

- 4.1 This section describes the design evolution that has occurred as a result of the feedback received during the consultation period associated with the Proposed Development outlining the changes introduced by the Revised Development that forms the extent of this FEI.
- 4.2 In response to the consultee comments received, the following changes have been incorporated into the Revised Development to address comments and reduce the potential for significant adverse environmental effects to occur:
- Relocation of Turbine 3 and Turbine 5, moving each turbine approximately 200m;
 - Reduction in height of Turbines 1,2,3,4,5,6, 8, 10 and 12 to 200m;
 - Reduction in height of Turbines 7, 9, 11, 13, 14, and 15 to 230m;
 - Realignment of "South Option" track south of T15; and
 - Realignment of turning head north of T15.

Description of the Revised Development

- 4.3 This FEI seeks permission for:
- "Erection and Operation of a Wind Farm for a period of 35 years, comprising of 15 No. Wind Turbines with a maximum blade tip height of 230m, with associated infrastructure."*
- 4.4 This description of the Revised Development will be used in any public notices associated with the Revised Development. A site layout plan is included within this application as **Figure 4.1**.
- 4.5 Further information regarding the specific details of each wind turbine proposed and the changes between the Proposed Development and the Revised Development presented by this FEI are presented in Table 3.2 below.
- 4.6 The overall generating capacity of the Revised Development remains as previously (Revised Development, FEI).
- 4.7 The Revised Development remains within the same red-line planning boundary as that assessed by the EIAR.

Further Information Regarding Key Components

- 4.8 The Revised Development is illustrated in **Figure 4.1** and would consist of the following key elements:

- Fifteen wind turbines comprising six turbines up to 230m to tip height, and nine turbines up to 200m tip height;
- Crane pads;
- Foundations;
- Amended on-site tracks and turning heads where applicable;
- Borrow pit search areas;
- A site substation, support building & construction compound; and
- Underground cables linking the turbines to the substation.

4.9 Specific details regarding each of the key components proposed by the Revised Development are provided under the respective subheading below:

Wind Turbines

4.10 The specific details of each wind turbine proposed by the Revised Development, alongside a summary of any proposed change from the turbines included in the Proposed Development are presented in Table 3.2 below.

Table 3.2: Individual Turbine Details

EIAR Turbine No.	FEI Turbine No.	Height to Blade Tip (up to)	Hub Height	Rotor Diameter
1	1	200m	119m	81.5m
2	2	200m	119m	81.5m
3	3	200m	119m	81.5m
4	4	200m	119m	81.5m
5	5	200m	119m	81.5m
6	6	200m	119m	81.5m
7	7	230m	149m	81.5m
8	8	200m	149m	81.5m
9	9	230m	149m	81.5m
10	10	200m	119m	81.5m
11	11	230m	149m	81.5m
12	12	200m	119m	81.5m
13	13	230m	149m	81.5m
14	14	230m	149m	81.5m
15	15	230m	149m	81.5m

- 4.11 The amendments proposed by the Revised Development are designed to further reduce potential impacts and effects whilst introducing positive changes in response to consultee comments received regarding the Proposed Development. Furthermore, the Revised Development seeks to introduce a positive degree of change whilst balancing other constraints and the need for efficient energy generation.
- 4.12 The Revised Development seeks to retain a micrositing allowance of 100m for wind farm infrastructure that was originally requested in the application for the Proposed Development. This micrositing allowance is designed to provide sufficient flexibility on the basis that, should planning permission be granted, the Applicant will then commission detailed ground investigations and geotechnical surveys to determine the exact ground conditions and microsite component infrastructure accordingly (with restrictions in place to safeguard constraint buffers as applicable).

Crane pads & foundations

- 4.13 Crane hardstandings and turbine foundations have not moved and therefore the description of these components as provided within the EIAR remains relevant and correct.

On-site tracks and turning heads

- 4.14 The Revised Development largely maintains the s access and onsite tracks as proposed within the EIAR, however the tracks between turbines 3 and 5 have been relocated to accord with the revised turbine locations, and the "Option 2" track to T15 has been relocated slightly to cross the watercourse perpendicularly, following feedback from SEPA.
- 4.2 Turning heads at T3 and T5 have been moved slightly, as has the turbine head north of T15, to avoid an area of deeper peat. All other turning heads remain the same as previously proposed.

Borrow-pit search area

- 4.15 The Revised Development maintains the borrow pit as per the original location suggested within the Proposed Development, of which SEPA had no objection.
- 4.16 The methodology for assessing the suitability of the search area for a borrow pit remains the same as that set out within the EIAR, and no borrow pit works will be commenced without a final borrow pit location being submitted and approached by THC and other relevant consultees, including SEPA. This approach can be protected by a suitably worded pre-commencement planning condition if deemed appropriate.

Site Substation and Construction Compound

- 4.17 The Revised Development maintains the location of the on site substation and construction compound, which will also contain the onsite battery storage facility.

Underground cables

- 4.18 Underground cables are proposed to run adjacent to the tracks to connect the individual turbines and have been amended by the Revised Development accordingly, in-line with the proposed track and turbine amendments.

Balancing Constraints with Need for Efficient Generation

- 4.19 Throughout the design process, the main concept driving the amendments proposed to the Revised Development has been to ensure the development seeks a balance between minimising any associated environmental impacts whilst maximising the potential electricity output in a manner that is efficient and economically viable, thereby maximising the contribution the Revised Development can make to national renewable energy targets.
- 4.20 The Applicant considers the Revised Development has built upon the improvements introduced by EIAR and continues to achieve an improved balance between efficient electricity generation and minimising potential impacts on environmental receptors, offering positive changes that incorporates comments received from consultation responses.

5 GRID CONNECTION ROUTE

Introduction

- 5.1 This section outlines the currently understood parameters of the likely grid connection corridor for the proposed development. The subsequent sections provide a high-level assessment of the potential likely significant environmental effects associated with its routing. This assessment is based on the information available at the time of writing, recognising that the final grid connection details have yet to be confirmed.
- 5.2 Under the process of Connections Reform outlined in Section 2, the proposed development does not currently benefit from a Gate 2 grid connection agreement, however may do so in the future. As such the following details for the grid connection have not been confirmed by SSEN:
- Point of Connection (PoC) to the electricity transmission network;
 - Connection voltage;
 - Route corridors, including the preferred route; and
 - The balance of overhead line and underground cable sections of the preferred route.
- 5.3 Until these details are confirmed by SSEN it is not possible to provide an EIA of the final grid connection route. As explained in Section 2, SSEN will not commence work on the connection details unless and until consent for Acheilidh Wind Farm has been granted. This necessarily limits the level of detail and the certainty at which environmental effects can be assessed at this stage.
- 5.4 The proposed development has a Gate 1 offer with Clause 3a protection. This means at this stage the offer is indicative; however, it guarantees that the proposed development would be offered a Gate 2 offer (between 2031 and 2035) for projects which have submitted valid planning applications before 20th December 2024, upon consent of Acheilidh Wind Farm. This means that if the Scottish Ministers decide to grant consent and deemed planning permission for the wind farm, NESO will subsequently provide a grid offer for it to join other Gate 2 projects.
- 5.5 Accordingly, this FEI presents a high-level environmental assessment based on the information currently available regarding the likely grid connection at the time of writing.

Indicative Grid Connection Details

Outline Plans

- 5.6 Discussions with SSEN to date have been caveated with the understanding that the trigger point for SSEN undertaking extensive work on the grid connection has not yet been met. However, it is understood that the likely method of connection would be via the existing overhead line which runs through the southernmost part of the site, where the onsite wind

farm substation has been located. This means that any works to connect into the network would be minimal and require very little further works over and above that already proposed by the wind farm itself. With the overhead line running through the site, it would be possible to have an onsite sealing in complex to connect the wind farm to the network, as shown indicatively in Figure 5.1.

- 5.7 Figure 5.1 shows the likely grid connection route.
- 5.8 It is assumed that in future, the next stages would be for SSEN to provide a further application from the onsite substation to the network.

Assessment of Effects

- 5.9 The onsite substation is located approximately 10m at its closest point to the overhead line where it could connect to the network. Based on this short connection, and it being located fully within the site boundary of the windfarm, there are no further likely effects anticipated as a result of the grid connection over and above those identified within the 2025 EIAR.

Summary

- 5.10 Due to the localised nature of the grid connection, it is not expected that the grid connection will result in any likely effects over and above that already assessed within EIAR and FEI given the connection is within the current redline boundary.

6 LANDSCAPE AND VISUAL

Preface

- 6.1 The first iteration of this Landscape and Visual Impact Assessment (LVIA) was produced for a planning application to the Energy Consents Unit of the Scottish Government: ECU00005163.
- 6.2 Determination of the planning application, which sought permission for the erection of 15no wind turbines of up to 250m to tip, and associated infrastructure, is currently underway. Relevant stakeholders have reviewed the application for the proposed wind farm (herein referred to as the proposed development), with The Highland Council (THC) providing a specific LVIA post-EIAR submission consultation response to the application, notably in respect to the following:
- The proposed turbine heights and design.
 - The sequential assessment of the A836 and A838.
 - Darkness hours visualisations.
- 6.3 As a result, the Applicant amended the proposed development, as assessed previously. The following information was presented as Additional Information (AI) to the planning application in response to THC feedback and the proposed design amendments:
- Comparative wirelines from LVIA viewpoints: one set displaying all proposed turbines at 250m (as per the proposed development); and another set with the turbines at a mix of 200m and 230m (revised development).
 - Updated sequential assessment of both the A838 and A836 trunk roads with reference to the revised turbine specifications, which was to be accompanied by a series of sequential wireline visualisations.
 - Updated night-time photography from LVIA Viewpoint 14: A836 near An t-Sron, and LVIA Viewpoint 16: Torroble.
- 6.4 In preparing the updated sequential assessment of the A836 and A838, a conclusion in relation to an approximate overall length of both routes which would be significantly affected as a result of the proposed development was also included, as requested by THC.
- 6.5 Further to review of the AI, THC requested that Turbines 3 and 5 (T3 and T5), be located downslope from the hilltop of Meall Odhar, reducing the Above Ordnance Datum (AOD). As a result, the Applicant made the following design changes, with the amended development herein referred to within this LVIA as the revised development:
- T3 has moved north-east and downslope from 238m to 218m AOD.
 - T5 has moved east and downslope from 235m to 215m AOD.
- 6.6 This version of the LVIA has been updated to reflect these changes, with all assessments subsequently re-assessed by the same project landscape consultants that produced the first assessment. Since the first publication of this LVIA, and accompanying figures and visualisations, the cumulative situation has also changed, most notably with the recent

planning application for a single turbine extension to the consented Sallachy Wind Farm. This LVIA includes an updated assessment on cumulative landscape and visual effects.

- 6.7 As agreed with the Applicant and THC, the updated LVIA, which will be presented as Further Environmental Information (FEI), has been updated in its entirety. This LVIA should therefore be read in conjunction with the previous iteration and the accompanying figures and visualisations.

Revised Development

- 6.8 As per the proposed development, the revised development, includes 15no. wind turbines. The revised development includes a reduction in height to all proposed turbines, with the new EIAR layout comprising 9no. turbines of up to 200m to tip height (hub height 119m, rotor diameter 162m used for modelling) and 6no. turbines of up to 230m to tip height (hub height 149m, rotor diameter 162m used for modelling).
- 6.9 As aforementioned, two turbines in the north-west of the Site (T3 and T5) have been micro-sited downslope from the hilltop of Meall Odhar, with crane hardstandings slightly altering to accommodate a change in access tracks. Other elements have not changed from the proposed development, including one substation, energy storage compound, and a temporary construction and storage compound. There would be no change to the proposed Lighting Strategy to provide aviation warning lights on the nacelles of six of the proposed turbines. Full information on the revised development is set out in **Chapter 3: Project Description**.

Introduction

- 6.10 This chapter of the Environmental Impact Assessment Report (EIAR) presents a LVIA of the revised development. The purpose of an LVIA, when undertaken in the context of an Environmental Impact Assessment (EIA), is to identify any likely significant landscape and visual effects arising as a result of the revised development. An LVIA must consider both:
- Effects on the landscape as a resource in its own right (the landscape effects); and
 - Effects on specific views and visual amenity more generally (the visual effects).
- 6.11 Therefore, this LVIA considers the potential effects of the revised development upon:
- Individual landscape features and elements.
 - Landscape character.
 - Specific views; and
 - People who view the landscape.
- 6.12 In this chapter, landscape and visual effects are assessed separately; although, the procedure for assessing each of these is closely linked and follows 'The Guidelines for Landscape and Visual Impact Assessment, 3rd Edition' (GLVIA3)¹.
- 6.13 The main objectives of the landscape assessment can be summarised as follows:

¹ Landscape Institute and the Institute for Environmental Management and Assessment (2013) The Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3).

- To identify, evaluate and describe the baseline landscape character of the Site and its surroundings and also any notable individual landscape features within the Site.
- To determine the nature of the landscape receptor (i.e. the sensitivity of the landscape) through a consideration of its susceptibility to the type of development proposed and any values associated with it.
- To identify and describe any impacts of the revised development in so far as they affect the landscape resource.
- To evaluate the nature of the landscape effects (i.e. the magnitude, duration, and reversibility of the effect).
- To identify and describe mitigation measures that have been adopted to avoid, reduce, and compensate for landscape effects.
- To evaluate the relative significance of residual landscape effects; and
- To determine which landscape effects, if any, are significant.

6.14 The main objectives of the visual assessment are similar and can be summarised as follows:

- To identify, evaluate and describe the baseline visual context of the Site and its surroundings with a focus on both specific views and the more general visual amenity experienced by people who have views of the Site.
- To determine the nature of the visual receptor (i.e. the sensitivity of the viewpoint or person whose visual amenity is affected) through a consideration of the susceptibility of the viewpoint/person to the type of development proposed and any values associated with either the viewpoint or visual amenity experienced.
- To identify and describe any impacts of the development in so far as they affect a viewpoint or views experienced;
- To evaluate the nature of the visual effects (i.e. the magnitude, duration and reversibility of the effect).
- To identify and describe mitigation measures that have been adopted to avoid, reduce and compensate for visual effects.
- To evaluate the relative significance of residual visual effects; and
- To determine which visual effects, if any, are significant.

6.15 The LVIA also considers any cumulative landscape and visual effects which may arise as a result of the revised development in conjunction with other wind farm developments.

6.16 The main LVIA presented in this chapter is supported by figures and visualisations in **EIAR Volume 2**. NatureScot Visualisations are contained in **Volume 3**, with technical appendices presented in **Volume 4**. The Highland Council Visualisations can be found in **Volume 5**.

6.17 The location of the revised development and the study area for the LVIA is illustrated on **Figures 6.1 and 6.2**. For reference, other operational, consented, in-planning, and scoping/pre-application wind farms within 45km - which are referred to throughout this chapter - are illustrated on **Figure 6.29**.

6.18 This chapter is structured as follows:

- Legislation, Policy, and Guidance.
- Consultation.

- Assessment Methodology and Significance.
- Scope of Assessment.
- Baseline Conditions.
- Assessment of Potential Effects
- Mitigation.
- Assessment of Residual Effects.
- Assessment of Cumulative Effects.
- Summary.

6.19 Other relevant chapters include **Chapter 3: Project Description, Chapter 4: Design Evolution, Chapter 7: Cultural Heritage, and Chapter 14: Forestry.**

6.20 This chapter of the EIA Report has been prepared by Pegasus Group Limited (Pegasus). The Lead Author is Scott Cochran-Sharp, who is a Chartered Member of the Landscape Institute (CMLI). All work prepared has been peer reviewed by highly experienced and specialised staff at Pegasus.

Legislation, Policy, and Guidance

Legislation

European Landscape Convention, Adopted 2000

- 6.21 'The European Landscape Convention' (ELC)², is the first international convention to focus specifically on the landscape as a resource in its own right. The convention promotes landscape protection, management, and planning, as well as European co-operation on landscape issues. Signed by the UK Government in February 2006, the ELC became binding from March 2007. It applies to all landscapes, towns, and villages, as well as open countryside; the coast and inland areas; and ordinary or even degraded landscapes, as well as those that are afforded protection.
- 6.22 The UK Government has stated that it considers the UK to be compliant with the ELC's requirements and in effect the principal requirements of the ELC are already enshrined in the existing suite of national policies and guidance on the assessment of landscape and visual effects.
- 6.23 The ELC defines landscape as:
- "An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."*
- 6.24 It is important to recognise that the ELC does not require the preservation of all landscapes; although, landscape protection is one of the core themes of the convention. Equally important though is the requirement to manage and plan future landscape change.
- 6.25 The ELC highlights the importance of developing landscape policies dedicated to the protection, management, and planning of landscapes. In this regard, NatureScot and THC have a suite of landscape character assessments and landscape sensitivity studies which

² Council of Europe (2000) Council of Europe Landscape Convention (ETS No.176). Available at: <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treaty-num=176>

enables decisions to be made with due regard to landscape character, as promoted by the ELC.

Policy

- 6.26 **Chapter 5: Renewable Energy and Planning Policy** of the EIA Report sets out the planning policy framework that is relevant to the EIA process and the revised development. The policies set out include those from The Highland Council Highland-wide Local Development Plan (HwLDP)³, relevant aspects of NPF4 (National Planning Framework 4) (2023)⁴, Planning Advice Notes and other relevant guidance.

National Planning Framework 4

- 6.27 The following planning policies were reviewed as part of the desk study for the LVIA.
- Policy 1: Tackling the Climate and Nature crisis.
 - Policy 3: Biodiversity.
 - Policy 4: Natural places.
 - Policy 6: Forestry, woodland and trees.
 - Policy 11: Energy.
- 6.28 Policy 4 (c): Natural places, states that where development proposals affect National Scenic Areas (NSA), they will only be supported where:
- *“i. The objectives of designation and the overall integrity of the areas will not be compromised; or*
 - *ii. Any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance.”*
- 6.29 With reference to Designated Landscapes in the HwLDP, Policy 4, ‘d’ states that development will only be supported where:
- *“i. Development will not have significant adverse effects on the integrity of the area or the qualities for which it has been identified; or*
 - *ii. Any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance.”*
- 6.30 On Wild Land Areas, Policy 4, ‘g’ states that *“Buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration”*.
- 6.31 With regards to Policy 11: Energy, ‘e’ states:

³ The Highland Council (2012) Highland-wide Local Development Plan. Available at:
https://www.highland.gov.uk/info/178/development_plans/199/highland-wide_local_development_plan

⁴ Scottish Government (2023) National Planning Framework 4. Available at:
<https://www.gov.scot/publications/national-planning-framework-4/>

"In addition, project design and mitigation will demonstrate how the following impacts are addressed:

- *"i. impacts on communities and individual dwellings, including, residential amenity, visual impact, noise and shadow flicker;*
- *ii. significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable;*
- *iii. public access, including impact on long distance walking and cycling routes and scenic routes;*
- *iv. impacts on aviation and defence interests including seismological recording;*
- *v. impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised;*
- *vi. impacts on road traffic and on adjacent trunk roads, including during construction;*
- *vii. impacts on historic environment;*
- *viii. effects on hydrology, the water environment and flood risk;*
- *ix. biodiversity including impacts on birds;*
- *x. impacts on trees, woods and forests;*
- *xi. proposals for the decommissioning of developments, including ancillary infrastructure, and site restoration;*
- *xii. the quality of site restoration plans including the measures in place to safeguard or guarantee availability of finances to effectively implement those plans; and*
- *xiii. cumulative impacts."*

6.32 It is noted that there are a number of other policies of particular relevance to landscape and visual matters. In particular, these include Policy 11 of NPF4 and specifically section 'e' ii, which states that: *"Where impacts are localised and/or appropriate design mitigation has been applied, they will generally be considered to be acceptable"*. Whilst there is no definition of 'localised' set out in NPF4, it is considered that localised relates to not just the distance to which significant effects would occur, but also the type of landscape, the scale of the type of development proposed and the number of receptors who may be impacted by significant effects. In this context it is considered that the revised development only gives rise to localised landscape and visual effects, and this is demonstrated in the assessments set out in subsequent sections of this chapter. It is also considered that appropriate design mitigation has been applied, which is discussed in the wider application submission material.

Highland-wide Local Development Plan (HwLDP)

6.33 The following planning policies were reviewed as part of the desk study for the LVIA:

- Policy 67: Renewable Energy Development.
- Policy 36: Development in the wider countryside.
- Policy 57: Natural Built and Cultural Heritage.
- Policy 61: Landscape.
- Policy 77: Public Access.

- Policy 78: Long Distance Routes.

Caithness and Sutherland Local Development Plan (CaSPlan)

- 6.34 The Caithness and Sutherland Local Development Plan (CaSPlan)⁵ was also reviewed as part of the desk study for the LVIA.
- 6.35 As the CaSPlan is focussed primarily on regional and settlement strategies as well as identifying specific site allocations, it is considered to have minimal relevance with respect to the revised development.

Supplementary Guidance

- 6.36 The following supplementary guidance and technical reports which provide the evidence base for current planning policy were also reviewed:
- The Highland Council Onshore Wind Supplementary Guidance⁶ and Addendum⁷ (OWESG).
 - Assessment of Highland Special Landscape Areas⁸.
 - NatureScot Assynt - Coigach NSA description and special qualities⁹.
 - NatureScot Dornoch Firth NSA description and special qualities¹⁰.
 - NatureScot Kyle of Tongue NSA description and special qualities¹¹.
 - NatureScot North-West Sutherland NSA description and special qualities¹².
 - NatureScot Rhiddoroch – Beinn Dearg – Ben Wyvis Wild Land Area description¹³.
 - NatureScot Inverpolly - Glencanisp Wild Land Area description¹⁴.
 - NatureScot Quinag Wild Land Area description¹⁵.
 - NatureScot Reay - Cassley Wild Land Area description¹⁶.

⁵ The Highland Council (2018) Caithness and Sutherland Local Development Plan. Available at: https://www.highland.gov.uk/info/178/development_plans/283/caithness_and_sutherland_local_development_plan

⁶ The Highland Council (2016) Onshore Wind Energy: Supplementary Guidance. Available at: https://www.highland.gov.uk/downloads/download/165/onshore_wind_energy_supplementary_guidance

⁷ The Highland Council (2017) Landscape Sensitivity Appraisal: Black Isle, Surrounding Hills and Moray Firth Coast Caithness. Available at: https://www.highland.gov.uk/downloads/download/165/onshore_wind_energy_supplementary_guidance

⁸ Horner + MacLennan with Mike Wood (2011) Assessment of Highland Special Landscape Areas. Commissioned by The Highland Council in partnership with Scottish Natural Heritage

⁹ NatureScot (2010) Assynt - Coigach NSA. Available at: <https://sitelink.nature.scot/site/9119>

¹⁰ NatureScot (2010) Dornoch Firth NSA. Available at: <https://sitelink.nature.scot/site/9122>

¹¹ NatureScot (2010) Kyle of Tongue NSA. Available at: <https://sitelink.nature.scot/site/9133>

¹² NatureScot (2010) North-West Sutherland NSA. Available at: <https://sitelink.nature.scot/site/9144>

¹³ NatureScot (2017) Description of Wild Land Area: 29 Rhiddoroch – Beinn Dearg – Ben Wyvis. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Rhiddoroch-Beinn%20Dearg-Ben-Wyvis-July-2016-29.pdf>

¹⁴ NatureScot (2017) Description of Wild Land Area: 32 Inverpolly - Glencanisp. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Inverpolly-Glencanisp-July-2016-32.pdf>

¹⁵ NatureScot (2017) Description of Wild Land Area: 33 Quinag. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Quinag-July-2016-33.pdf>

¹⁶ NatureScot (2017) Description of Wild Land Area: 34 Reay - Cassley. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Reay-Cassley-July-2016-34.pdf>

- NatureScot Ben Klibreck - Armine Forest Wild Land Area description¹⁷.
- NatureScot Causeymire - Knockfin Flows Wild Land Area description¹⁸.
- NatureScot Foinaven - Ben Hee Wild Land Area description¹⁹.
- NatureScot Ben Hope – Ben Loyal Wild Land Area description²⁰.
- NatureScot Cape Wrath Wild Land Area description²¹.

Consultation

- 6.37 Throughout the planning application and the EIA scoping process, and subsequently during the ongoing EIA process, relevant organisations were contacted with regards to the revised development.
- 6.38 Consultation relevant to the LVIA was undertaken with THC regarding methodology, sources of information, viewpoint selection, scope of assessment, and cumulative development. Following the EIA scoping process, further consultation was sought with THC to confirm agreement on LVIA viewpoints and different parts of the assessment through email correspondence; although, it should be noted that no confirmation email was ever received from THC at the time the previous iteration of the LVIA was written. **Table 6.1: Consultation Responses** below outlines the consultation responses received in relation to landscape and visual matters during the EIA scoping process. For detail on post-EIAR submission consultation responses to the application, please refer to the Preface of this chapter, along with **Chapter 3**.

¹⁷ NatureScot (2017) Description of Wild Land Area: 35 Ben Klibreck - Armine Forest. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Ben-Klibreck-Armine-Forest-July-2016-35.pdf>

¹⁸ NatureScot (2017) Description of Wild Land Area: 36 Causeymire - Knockfin Flows. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Causeymire-Knockfin-Flows-July-2016-36.pdf>

¹⁹ NatureScot (2017) Description of Wild Land Area: 37 Foinaven - Ben Hee. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Foinaven-Ben-Hee-July-2016-37.pdf>

²⁰ NatureScot (2017) Description of Wild Land Area: 38 Ben Hope – Ben Loyal. Available at: <https://www.nature.scot/sites/default/files/2021-06/Wild%20land%20Description%20Ben-Hope-Ben-Loyal-July-2016-38.pdf>

²¹ NatureScot (2015) Description of Wild Land Area: 40 Cape Wrath. Available at: <https://www.nature.scot/sites/default/files/2021-08/Wild%20land%20description%20-%2040%20Cape%20Wrath%20WLA.pdf>

Table 6.1: Consultation Responses

Date Received	Details	Consultation Response	Where and how is this addressed
Energy Consents Unit (ECU)			
Scoping Opinion (13 September 2024)	Aviation Lighting	<i>"It is recommended by the Scottish Ministers that with regards to impacts of night time aviation lighting, the Company should discuss and agree with the Highland Council and NatureScot the range (in kilometres from the proposed Development) for hours of darkness assessments of the impacts of aviation lighting and receptors therein to be assessed.</i> <i>As well as the scope, methodology, findings and recommendations of such assessments, full details of all mitigation of aviation lighting impacts subsequently identified should be provided in the EIA report."</i>	The LVIA considers the effects of aviation lighting during dark sky hours on all visual receptors, with the assessment carried out in accordance with Annex 1 of NatureScot pre-application guidance for onshore wind farms. Night-time visualisations have been provided from Viewpoint 1: A838 near Fiag Bridge, Viewpoint 3: A838 near Overscaig Hotel, Viewpoint 14: A836 near An t-Sron, and Viewpoint 16: Torroble
	Cumulative impact assessments	<i>"To ensure that cumulative impact assessments are as up-to-date as possible, other Developments to be included should be discussed and agreed by the Company and the Highland Council. Assessments, photography and visualisations submitted in the EIA report should reflect the most up-to-date cumulative position."</i>	The main LVIA (this chapter) includes an updated assessment of cumulative effects (see LVIA section Assessment of Cumulative Effects).
	Landscape and visual – study area	<i>"The study area in kilometres of the proposed Development should be agreed following discussion between the Company, NatureScot and the Highland Council."</i>	Following the EIA Scoping exercise, the initial LVIA study area and cumulative study area was increased to 45km in response to the feedback from consultees (as set out in subsequent sections of this chapter and as shown on LVIA Figures 6.1 – 6.36).

	Viewpoints and visualisations	<i>"The final list of viewpoints and visualisations should be agreed following discussion between the Company, the Highland Council, NatureScot and Mountaineering Scotland."</i>	Additional LVIA viewpoint requests made in scoping responses from THC were reviewed. An additional daylight and darkness hours LVIA viewpoint at Torroble has been added as requested by THC (see Viewpoint 16: Torroble). A wireline has been provided from the summits of Beinn Leoid, Ben Hope, Ben Loyal, and Carn a Choin Deirg, as requested by THC (see LVIA Viewpoints A-D).
	Mitigation Measures	<i>"The mitigation measures suggested for any significant environmental impacts identified should be presented as a conclusion to each chapter in the EIA report."</i>	The main LVIA (this chapter) includes a section of mitigation measures (see LVIA section Mitigation Measures and Monitoring).
The Highland Council (THC)²²			
Scoping Opinion (13 September 2024)	Photomontages	<i>"Photomontages should follow the Council's Visualisation Standards and are subject an independent verification check upon receipt"</i>	Visualisations to Highland Council Visualisation Standards are provided in Volume 5 – The Highland Council Visualisations .

²² The Applicant also received pre-application advice from The Highland Council (dated 16 October 2024). As the advice given was largely similarly to the advice presented in the EIA scoping opinion response (dated 13 September 2024), detail has only been included in Table 6.1 where it was considered to provide further advice beyond that provided in the EIA scoping opinion response

		<i>"Separate volumes of visualisations should be prepared to both Highland Council Standards and NatureScot guidance."</i>	Visualisations to NatureScot and Highland Council Visualisation Standards are provided in Volume 3 - NatureScot Visualisations, and Volume 5 – The Highland Council Visualisations, accordingly.
		<i>"All elements of a development are important to consider within any EIAR and the assessment must include the expected landscape and visual impact of on-site BESS, borrow pits, access roads, compounds including substations and battery storage, this is despite the fact that the principal structures will be a primary concern. All elements of the proposal are to be rendered into photomontages"</i>	The wind turbines will be the most conspicuous element of the revised development and other elements such as tracks, battery units, substation etc. would be relatively diminutive in views from many of the proposed LVIA viewpoints. Therefore, other project elements have been modelled into photomontages from LVIA viewpoints situated within 5km of the revised development where such elements would be visible.
	Viewpoint Locations	<i>"The Council is generally satisfied with the VPs selected but would request visualisations from Ben Hope within the Kyle of Sutherland National Scenic Area, and a further visualisation from the elevated road at Torroble (see OS Grid reference NC 59167 04228) to understand impacts at the housing groups near Lairg. Furthermore, for reasons set out in the Special Landscape Area paragraph below, a visualisation from Càrn a' Choin Deirg will be required. Please note that THC's Landscape Officer will provide further advice for the aforementioned PREMAJ in due course, which is likely to provide further detail on landscape, visual, and visualisation matters."</i>	An additional daylight and darkness hours LVIA viewpoint at Torroble has been added as requested by THC (see Viewpoint 16: Torroble). Given the distances from the Site, the limited potential for significant effects, and the proposed inclusion of similar LVIA viewpoints, wirelines have been provided from the summits of Beinn Leoid, Ben Hope, Ben Loyal, and Carn a Choin Deirg (see LVIA Viewpoints A-D).
	Study Area	<i>"The Study Area will be 45km, given the scale of the turbines."</i>	The initial LVIA study area and cumulative

		<i>Given the size of the turbines and the landscape sensitivities of this site and the surrounding area, we would expect a detailed assessment of effects should be undertaken for the whole Study Area, including for Cumulative Impact Assessment, which should also include an assessment of sequential effects as the receptor moves through the landscape."</i>	study area was increased to 45km in response to the feedback from THC. Whilst THC requested exclusion of a 20km detailed study area; following site visits and early analysis, a 20km detailed study area was reinstated, as it is judged that significant effects would not occur beyond a 20km distance from the Site.
	Methodology	<i>"the LVIA Chapter of the EIAR should clearly set out the methodology"</i>	The detailed assessment criteria used to determine landscape and visual sensitivity, magnitude of change and significance of effect are set out in Technical Appendix 6.1: Landscape and Visual Impact Assessment Criteria. The approach to the assessment of cumulative effects is set out in the main LVIA (this chapter). The approach to the residential visual amenity assessment is set out in Technical Appendix 6.6: Residential Visual Amenity Assessment (RVAA). The approach to the assessment of effects on Special Landscape Qualities of the NSA is set out in Technical Appendix 6.7: Assessment of Effects on Special Landscape Qualities and the approach to the assessment of visible aviation lighting is set out in Technical Appendix 6.8: Assessment of Night-time Lighting: Assessment Criteria and Methodology.

	Assessment of recreational routes	<i>"When assessing the impact on recreational routes please ensure that all core paths, rights of way, national cycle network, and long distance trails are assessed. It should be noted that these routes are used by a range of receptors."</i>	A preliminary assessment of all routes within the 20km detailed LVIA study area has been included at Technical Appendix 6.4: Preliminary Assessment of Visual Receptors . Those routes where receptors have the potential to experience significant effects have been assessed in detail in subsequent sections of this chapter.
	OWESG Criterion	<i>"We expect the Landscape Impact Assessment to refer to the Council's Onshore Wind Energy Supplementary Guidance and expect an assessment of the proposal against the criterion set out in the Council's OWESG at pages 19 and 20 to be included within the LVIA chapter of the EIAR."</i>	An assessment of the proposal against the Criterion is included within the accompanying Planning Statement .
	Landscape Impact Assessment	<i>"We advise that wind energy developments are generally sited within a complex combination of Landscape Character Types. As such, the Landscape Impact Assessment's analysis should not only focus on potential impacts on individual Landscape Character Types and individual Units, but also on the local landscape character composition within which these elements come together to define a particular sense of Place."</i>	The main LVIA (this chapter) includes an assessment of effects on landscape character in accordance with The Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3) – see section Identification and Evaluation of Key Effects .

	Landscape Designations	<i>"any assessments of Special Landscape Areas (SLA) including Ben Klibreck and Loch Choire SLA, and Fannichs, Beinn Dearg and Glencalvie SLA must be undertaken using the SLA citations available from the Council's website. The assessment should include consideration of intervisibility between the SLAs and to that end, a visualisation from Càrn a' Choin Deirg within the latter SLA will be required."</i>	A preliminary assessment of all Landscape Designations within the 20km detailed LVIA study area has been included at Technical Appendix 6.3: Preliminary Assessment of Landscape Character Types and Designations. Those designations identified as having the potential to experience significant effects have been assessed in detail in subsequent sections of this chapter. A wireline has been provided from the summit of Carn a Choin Deirg (see LVIA Viewpoint D).
	Effects of aviation lighting	<i>"As the heights of the proposed turbines are above 150m, aviation lighting is required. Further advice on aviation lighting is available from NatureScot however generally the impact of aviation lighting on WLAs and SLAs and areas where there would be an expectation of dark skies should be included. THC generally prefers the term 'Hours of Darkness' over 'Night-Time' in recognition of how extensive hours of darkness can be in the Highlands. It is pertinent to the assessment to understand that Hours of Darkness Effects will be visible during people's working day and commuting hours for a significant part of the year and that sensitivities of receptors to these effects must account for this. Therefore, Hours of Darkness VPs should be representative of commutes and communities, as well as Wild Land."</i>	The assessment of the effects of aviation lighting has been carried out in accordance with Annex 1 NatureScot pre-application guidance for onshore wind farms and NatureScot Guidance on Aviation Lighting Impact Assessment.

	Residential Visual Amenity Assessment	<i>"The residential visual amenity impact on sensitive properties occasioned by a wind farm with turbines of up to 230m tip height beyond 2km is unknown. The Council would suggest that a RVAA is not scoped out of the EIAR at this stage and that sensitive properties including the hotel are subject to a RVAA up to a minimum of 4km from the nearest turbine given the scale of the proposed turbines."</i>	A 4km study area has been used for the Residential Visual Amenity Assessment (RVAA) that accompanies the LVIA at Technical Appendix 6.6: Residential Visual Amenity Assessment (RVAA).
Pre-application advice for major developments (16 October 2024)	Cumulative Effects	<i>"Given the current and evolving wind energy developments in this part of Highland the proposal has potential to have cumulative and sequential visual impacts along the A838, the A837 along with the road heading north of Rosehall scheme pulling wind farms further west on a popular recreational route. Additionally, there are various other recreational routes in the wider surrounding area that may be affected by the proposed development including core paths, long-distance trails and key views from surrounding upland summits such as Ben Klibreck and Ben Hee are fully assessed."</i>	A preliminary assessment of all routes within the 20km detailed LVIA study area has been included at Technical Appendix 6.4: Preliminary Assessment of Visual Receptors. Those routes where receptors have the potential to experience significant effects have been assessed in detail in subsequent sections of this chapter. Key views have been considered in the viewpoint assessment presented in Technical Appendix 6.5: Viewpoint Assessment.
	Landscape and Visual Effects	<i>"Highland Council's Landscape Officer notes potential visibility of the proposed development extending into the Ben Klibreck and Loch Choire Special Landscape Area which would have both visibility of the development and be seen as a backdrop to the development. As such, the development has the potential to affect the Key Landscape and Visual Characteristics for the SLA. The ZTV also extends into the boundaries of North West Sutherland and Assynt-Coigach National Scenic Areas. The Special Qualities for both National Scenic Areas reference a lack of apparent human</i>	A preliminary assessment of all Landscape Designations within the 20km detailed LVIA study area has been included at Technical Appendix 6.3: Preliminary Assessment of Landscape Character Types and Designations. Those designations identified as having the potential to experience significant effects have been assessed in detail in

		activity and lack of movement in the landscape as defining elements of the area and the importance of the scale of the landscape. As such, the Landscape Officer considered the proposed development may effect perceptions of encroaching human influence and introduce of a new element in motion in the landscape and for the perceived scale of the mountains to be diminished in views where they are seen in the backdrop to the development. Ultimately, in both landscape and visual terms the success of the proposal will be measured by the extent to which it works in harmony with surrounding development and avoids unnecessary landscape and visual effects bearing in mind that any such effects are likely to extend into the hours of darkness by virtue of aviation lighting."	subsequent sections of this chapter. A detailed analysis of potential effects on the Special Qualities of the Assynt-Coigach NSA is further presented in Technical Appendix: 6.7: Assessment of Effects on Special Landscape Qualities. The LVIA considers the effects of aviation lighting during dark sky hours on all visual receptors, with the assessment carried out in accordance with Annex 1 of NatureScot pre-application guidance for onshore wind farms. Night-time visualisations have been provided from Viewpoint 1: A838 near Fiag Bridge, Viewpoint 3: A838 near Overscaig Hotel, Viewpoint 14: A836 near An t-Sron, and Viewpoint 16: Torroble.
NatureScot			
Scoping Opinion (26 August 2024)	Impacts on the Flow Country World Heritage Site (WHS)	"Assessment of impacts to the WHS only needs to consider criterion (ix) for peatland ecosystem quality, as this reflects UNESCO's decision."	Whilst the Flow Country influences the landscape baseline, and therefore the assessment of potential effects, the WHS is not a landscape protection designation, nor does it have any statutory status in this regard. Where relevant, potential effects are considered further within Chapter 8: Ecology.
	Landscape and Visual	"Having reviewed the supporting information for the proposed development, we do not consider that it would raise issues of National Interest in relation to its landscape, visual or	Noted. This advice has been taken forward into the main LVIA

		<i>cumulative effects. This is not to say that the development would not result in significant landscape or visual effects, rather that NatureScot does not judge these effects to meet our threshold in respect of our national remit for landscapes."</i>	(included in this chapter).
	Guidance documents	<i>"We recommend the applicants and their consultants review the document "NatureScot pre-application guidance for onshore wind farms"</i>	Noted. This advice has been taken forward into the main LVIA (included in this chapter).
Mountaineering Scotland			
Scoping Opinion (18 July 2024)	Assessment	<i>"Mountaineering Scotland's concern at this stage is ensuring that the proposed viewpoints will allow a comprehensive assessment of the proposed development from a mountaineering/hillwalking perspective should an application be made, specifically towards Ben More Assynt, Ben Leoid and Ben Hee, or northeast into the Ben Armine Forest. We endorse the proposed upland viewpoints suggested in the Scoping Report: VP2, VP6, VP7, VP10, VP12, VP13, which we think are sufficient for a proper assessment of visual impact on hillwalkers."</i>	Noted. This advice has been taken forward into the main LVIA (included in this chapter).

Assessment Methodology and Significance

- 6.39 The primary source of best practice for LVIA in the UK is the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3).
- 6.40 The LVIA presented in this chapter has been undertaken in accordance with the principles established in this document. It must however be acknowledged that GLVIA3 establishes guidelines not a specific methodology. The preface to GLVIA3 recognises that:
- "This edition concentrates on principles and processes. It does not provide a detailed or formulaic 'recipe' that can be followed in every situation – it remains the responsibility of the professional to ensure that the approach and methodology adopted are appropriate to the task in hand."*
- 6.41 The methodology for this assessment has therefore been developed specifically for this LVIA to ensure that it is appropriate and fit for purpose.
- 6.42 Consideration has also been given to the following documents:

- Landscape Institute Technical Guidance Note 2/19 Residential Visual Amenity Assessment (RVAA)²³.
- Landscape Institute Technical Guidance Note 06/19 Visual Representation of Development Proposals²⁴.
- Landscape Institute Technical Guidance Note 02/21 Assessing landscape value outside of national designations²⁵.
- Landscape Institute Technical Guidance Note LITGN-2024-01 Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3)²⁶.
- NatureScot Landscape Sensitivity Assessment Guidance (Methodology)²⁷.
- NatureScot Guidance Assessing the cumulative landscape and visual impact of onshore wind energy developments²⁸.
- NatureScot pre-application guidance for onshore wind farms²⁹.
- NatureScot General pre-application and scoping advice for onshore wind farms³⁰.
- NatureScot Guidance on Aviation Lighting Impact Assessment³¹.
- NatureScot Special Landscape Qualities - Guidance on assessing effects³².
- Scottish Natural Heritage Guidance Siting and Design of Wind farms in the Landscape, Version 3a³³.
- Scottish Natural Heritage Guidance Visual Representation of Wind Farms, Version 2.2³⁴.
- The Highland Council Visualisation Standards for Wind Energy Developments³⁵.

²³ Landscape Institute (2019) Technical Guidance Note 2/19 Residential Visual Amenity Assessment (RVAA). Available at: <https://www.landscapeinstitute.org/technical-resource/li-technical-notes/>

²⁴ Landscape Institute (2019) Technical Guidance Note 06/19 Visual Representation of Development Proposals. Available at: <https://www.landscapeinstitute.org/technical-resource/li-technical-notes/>

²⁵ Landscape Institute (2021) Technical Guidance Note 02/21 Assessing landscape value outside of national designations. Available at: <https://www.landscapeinstitute.org/technical-resource/>

²⁶ Landscape Institute (2024) Institute Technical Guidance Note LITGN-2024-01 Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3). Available at: <https://www.landscapeinstitute.org/technical/glvia3-panel/>

²⁷ NatureScot (2022) Landscape Sensitivity Assessment Guidance (Methodology). Available at: <https://www.nature.scot/doc/landscape-sensitivity-assessment-guidance-methodology>

²⁸ NatureScot (2021) Guidance Assessing the cumulative landscape and visual impact of onshore wind energy developments. Available at: <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments>

²⁹ NatureScot (2024) NatureScot pre-application guidance for onshore wind farms. Available at: <https://www.nature.scot/doc/naturescot-pre-application-guidance-onshore-wind-farms>

³⁰ Nature Scot (2024) NatureScot pre-application guidance for onshore wind farms. Available at: <https://www.nature.scot/doc/naturescot-pre-application-guidance-onshore-wind-farms>

³¹ NatureScot (2024) Guidance on Aviation Lighting Impact Assessment. Available at: <https://www.nature.scot/doc/guidance-aviation-lighting-impact-assessment>

³² NatureScot (January 2025) Special Landscape Qualities - Guidance on assessing effects. Available at: <https://www.nature.scot/doc/special-landscape-qualities-guidance-assessing-effects>

³³ SNH (2017) Guidance Siting and Design of Wind farms in the Landscape, Version 3a. Available at: <https://www.nature.scot/doc/siting-and-designing-wind-farms-landscape-version-3a>

³⁴ SNH (2017) Guidance Visual Representation of Wind Farms, Version 2.2. Available at: <https://www.nature.scot/doc/visual-representation-wind-farms-guidance>

³⁵ The Highland Council (2016) Visualisation Standards for Wind Energy Developments. Available at: https://www.highland.gov.uk/downloads/file/12880/visualisation_standards_for_wind_energy_developments

Scope of Assessment

- 6.43 The LVIA assesses both the long-term effects relating to the operational lifetime of the revised development and the short-term temporary effects associated with the construction of the revised development.
- 6.44 Where appropriate, the LVIA also considers any residual effects once the proposed turbines have been decommissioned and removed (assumed to be 35 years from the commencement of operation).
- 6.45 The LVIA considers both direct and indirect landscape and visual effects. It not only assesses the impacts associated with the turbines but also any related impacts resulting from the construction compound, borrow pits, underground cabling, site tracks, substation, energy storage facility, and access roads.
- 6.46 Consideration has been given to the movement of the turbine blades, along with seasonal variations when assessing the visibility of the revised development.
- 6.47 The LVIA also considers any cumulative effects arising in conjunction with other wind farm developments in the study area, as set out in subsequent sections of this chapter. Best practice guidelines identify two principal types of cumulative visual impact:
- Combined visibility – where the observer is able to see two or more developments from one viewpoint; and
 - Sequential visibility – where two or more developments are not visible at one location but would be seen as the observer moves along a linear route, for example, a road or public right of way.
- 6.48 The guidelines state that 'combined visibility' may either be 'in combination' (where two or more developments are visible from a fixed viewpoint in the same arc of view) or 'in succession' (where two or more developments are visible from a fixed viewpoint, but the observer is required to turn to see the different sites). Both types are discussed in this LVIA. The published GLVIA3 also indicates a difference in emphasis between sequential effects that are frequent and those which are occasional.
- 6.49 The primary purpose of the cumulative impact assessment is to consider the additional effects that might arise as a result of the revised development if the other consented and in-planning (awaiting determination) developments were also operational. In addition, the cumulative assessment also includes a further consideration of the overall totality of the effect, when the revised development is considered alongside the other operational or in-planning developments across the study area. Some consideration has also been given to any scoping/ pre-application developments in the study area.
- 6.50 In relation to both the effects of the revised development alone and the cumulative effects with other wind farm developments in the study area, both beneficial (positive) and adverse (negative) effects are considered. Wind farms give rise to a wide spectrum of opinions, ranging from strongly negative to strongly positive, with a wide range of opinions lying somewhere between these two positions. Some people view turbines as incongruous or industrial structures whilst others view them as aesthetically pleasing, elegant structures, and a positive response to climate change. This spectrum of opinion has come to be referred to in relation to wind farms as the concept of valency.
- 6.51 For the avoidance of doubt, in considering the effects of the revised development, a precautionary approach to the assessment has been adopted and it is assumed that,

unless specifically stated otherwise, the effects of the revised development would be adverse in nature even though it is acknowledged that, for some people, the impacts could be considered to be beneficial.

Study Area

- 6.52 The initial study area for the LVIA is 45km radius from the turbines in all directions, as agreed with THC. The extent of this study area is illustrated in **Figure 6.1**. Initial site work informed by analysis of preliminary ZTVs and wirelines from the agreed viewpoint locations indicated that any significant landscape and visual effects are likely to occur within a much narrower radius from the Site; therefore, the level of assessment work in this LVIA incrementally decreases with distance from the Site, with the greatest focus of assessment being within broadly 20km of the Site. The intention is that the detail of the LVIA remains proportional to the likely significance of effects, as advocated in GLVIA3.
- 6.53 In terms of cumulative effects, the intention has again been that assessment work is proportional to the likelihood of significant effects arising. The approach adopted in the cumulative LVIA has been to focus on other wind farms which are either operational, under construction, consented, subject to a full planning application, or that have received a scoping opinion response. Furthermore, the approach has been to focus the assessment on other wind farm developments which have the potential to give rise to significant cumulative effects. Further details of this approach are set out in subsequent sections of this chapter.

Effects Assessed in Full

- 6.54 **Table 6.2** presents the receptors/ matters that are scoped in for further assessment, together with appropriate justification. Where a change has occurred since EIA scoping, this is clearly stated and justified.

Table 6.2: Receptors/ Matters Scoped in for Further Assessment

Receptors/ Matters	Phase	Justification	Change Since EIA Scoping?
Landscape features within the Site	All phases	Due to the potential direct effects resulting from the revised development	No change.
Landscape character within the proposed detailed 20km LVIA study area	All phases	Due to the potential for direct and indirect landscape effects resulting from the revised development	No change. THC requested exclusion of a 20km detailed study area and inclusion of a 45km study area; however, following site visits and early analysis, a 20km detailed study area was reinstated, as it is judged that significant effects upon landscape character would not occur beyond 20km.
Visual amenity within the proposed detailed 20km LVIA study area	All phases	Due to the potential for visual landscape effects resulting from the revised development	No change. THC requested exclusion of a 20km detailed study area and inclusion of a 45km study area; however, following site visits and early analysis, a 20km detailed study area was reinstated, as it is judged that potential for significant effects upon visual amenity would not occur beyond 20km.
Effects on visual receptors resulting from the proposed aviation lighting	Operation	The assessment of turbine lighting will consider the additional visual effects introduced by the proposed aviation lights. The assessment has been informed by a ZTV of the lit turbines out to 20km, a turbine lighting intensity ZTV to 2km and night-time visualisations prepared from Viewpoints 1, 3, 14, and 16	An additional dark sky visualisation has been prepared from Viewpoint 16: Torroble as requested by THC.

Cumulative effects	All phases	The assessment of cumulative effects has considered effects on landscape character and visual amenity with other operational, approved/under construction or in-planning wind farms	No change. THC requested exclusion of a 20km detailed study area and inclusion of a 45km study area; however, following site visits and early analysis, a 20km detailed study area was reinstated, as it is anticipated that potential cumulative significant effects would not occur beyond 20km.
Residential visual amenity	Operation	Exclusion of a RVAA as no properties located within 2km of a proposed turbine	THC requested inclusion of a RVAA to determine whether residents in properties within 4km of the revised development would experience a significant visual effect from their dwelling, curtilage or principal access.

Effects Scoped Out

6.55 **Table 6.3** below presents the receptors/ matters that are scoped out of further assessment, together with appropriate justification. Where a change has occurred since EIA scoping, this is clearly stated and justified.

Table 6.3: Receptors/ Matters Scoped out for Further Assessment

Receptors/ Matters	Phase	Justification	Change Since EIA Scoping?
Effects on receptors located outside of the ZTV	All phases	The revised development would not result in any effects where there is no predicted visibility	No change.
All receptors	Decommissioning	The effects experienced during decommissioning would be slightly less than those experienced during construction as decommissioning activities would use existing hardstandings and tracks	No change.

Effects on LCTs outside of the proposed detailed 20km LVIA study area	All phases	There would be no potential for indirect significant effects due to the distance from the revised development	No change. THC requested exclusion of a 20km detailed study area and inclusion of a 45km study area; however, following site visits and early analysis, a 20km detailed study area was reinstated, as it is judged that significant effects upon landscape character would not occur beyond 20km.
Effects on Designated Landscapes outside of the proposed detailed 20km LVIA study area	All phases	There would be no potential for indirect significant effects due to the distance from the revised development	No change. THC requested exclusion of a 20km detailed study area and inclusion of a 45km study area; however, following site visits and early analysis, a 20km detailed study area was reinstated, as it is judged that significant effects upon Designated Landscapes would not occur beyond 20km.
Effects on wild land	All phases	The Site is not located within an area of wild land. As a result, no assessments are required as Policy 4 (g) of NPF4 states that <i>"Buffer zones around wild land will not be applied and effects of development outwith wild land areas will not be a significant consideration."</i>	No change.
Effects on landscape character resulting from the proposed aviation lighting	Operation	As recognised in NatureScot's Guidance on Aviation Lighting Impact Assessment, during hours of darkness, the key characteristics of a landscape are less readily appreciated, with visible aviation lighting largely only affecting visual characteristics that can be appreciated at night, as well as the perceptions arising from those, such as the typical levels of darkness in	No change.

		the character area, and skylines. The assessment has therefore focussed on the effects of the visible aviation lighting on visual amenity. Without being able to fully appreciate landscape features and components that contribute to landscape character, it is not possible to carry out a meaningful landscape character assessment. This precedent was established in the Reporter's decision for Crystal Rig IV (WIN-140-8) (The Scottish Government. Crystal Rig IV Decision Letter. Dated 22 January 2021)³⁶	
Effects on settlements outside of the proposed detailed 20km LVIA study area	All phases	Due to the distance from the revised development and the very limited theoretical visibility, there is no potential for receptors in these settlements to experience significant visual effects	No change.
Effects on core paths outside of the proposed detailed 20km LVIA study area	All phases	Due to the distance from the revised development and the limited theoretical visibility, there is no potential for users of these core paths to experience significant visual effects	No change.

³⁶ The Scottish Government (2021) Crystal Rig IV Wind Farm (WIND-140-8). Reporter's Decision. Available at: <https://www.dpea.scotland.gov.uk/Document.aspx?id=732056>

Effects on long-distance walking routes outside of the proposed detailed 20km LVIA study area	All phases	Due to the distance from the revised development and the limited theoretical visibility, there is no potential for users of long-distance walking routes to experience significant visual effects	No change.
Effects on roads outside of the proposed detailed 20km LVIA study area	All phases	Due to the distance from the revised development and the limited theoretical visibility, there is no potential for users of these roads to experience significant visual effects	No change.

Landscape Assessment Methodology

- 6.56 A baseline landscape assessment was conducted to determine the current features and character of the landscape within and surrounding the Site.
- 6.57 The baseline landscape assessment involved firstly a review of desk material including:
- Ordnance Survey maps at 1:250,000; 1:50,000; 1:25,000 and 1:10,000 scales.
 - Aerial photographs of the Site and surrounding area.
 - Topography.
 - Current and historical land use.
 - Geology and soil maps.
 - Historic Parks and Designated Landscapes.
 - Relevant planning policy.
 - Relevant landscape sensitivity/ capacity studies.
 - Relevant landscape character assessments.
 - Relevant Historic Landscape Character Assessments.
- 6.58 Field visits have been conducted in a variety of weather conditions and at various times of the year during the preapplication and post-application stages.
- 6.59 The baseline assessment identified the existing landscape features on the Site, and in the immediate vicinity, and how these elements combine to give the area a sense of landscape character. Plans and construction details of the revised development were used to determine the potential impacts of the development on landscape features and character.
- 6.60 The LVIA firstly assesses how the revised development would impact directly on any existing landscape features or elements (e.g. removal of trees etc.). The LVIA then considers

impacts on landscape character with reference to landscape character areas/ types identified in published landscape character documents.

Visual Assessment Methodology

- 6.61 Potential visual receptors of the revised development were identified by interpretation of digitally generated ZTVs (see **Technical Appendix 6.2: ZTV and Visualisation Information** for an explanation of how the ZTVs were produced).
- 6.62 A selection of viewpoints was identified and agreed with statutory consultees to represent a range of views and viewer types as discussed in Visual Representation of Wind farms – Version 2.2 (NatureScot) and in Paragraphs 6.16-6.20 of GLVIA3. The assessment viewpoints are listed in **Table 6.4: Assessment Viewpoints**.
- 6.63 The viewpoints cover a variety of different character areas, are in different directions from the Site, and are at varying elevations. Some of the viewpoints are intended to be representative of the visual experience in a general location whereas other viewpoints illustrate the view from a specific or important vantage point. The viewpoints are located at a range of distances from the revised development to illustrate the varying magnitude of visual impacts.
- 6.64 Visualisations were produced for each of the viewpoints. NatureScot visualisations are presented in **Volume 3**, with THC Visualisations provided in **Volume 5**. An explanation of how they were produced and information to be read in conjunction with the visualisations is provided in **Technical Appendix 6.2: ZTV and Visualisation Information**.
- 6.65 Each of the representative viewpoints was visited to gain an understanding of the sensitivity of the viewpoint receptors and to make professional judgements on the likely visual effects arising from the revised development.
- 6.66 The viewpoints were used as the starting point for considering the effects on visual receptors within the 20km detailed LVIA study area. The visual assessment does not rely solely on the viewpoint assessments to determine the significance of effects on different visual receptor groups throughout the study area. It should be recognised that the viewpoints illustrated in the LVIA simply represent a series of snapshots from a small selection of the locations within the study area from where the revised development would be visible. Following the viewpoint assessment, the LVIA considers the effect on visual amenity throughout the study area with reference to different visual receptor groups at varying distances from the Site.

Assessment Criteria

- 6.67 The purpose of an LVIA when produced in the context of an EIA is to identify any significant landscape and visual effects within the study area to assist the determining authority in deciding the acceptability of the development under consideration.
- 6.68 In accordance with GLVIA3, the level (relative significance) of an effect is ascertained by considering in tandem the nature (sensitivity) of the baseline landscape or visual receptor and the nature (magnitude) of change as a result of the revised development. These two judgements are described as very high, high, medium, low, or very low.
- 6.69 The relative significance of landscape or visual effects is described as **major, major/moderate, moderate, moderate/minor, or minor**. No effect may also be recorded where the effect is negligible. Professional judgement is then employed to determine whether the

effect is significant or not. Those effects described as **major, major/ moderate** and in some cases, **moderate**, may be regarded as significant.

- 6.70 The detailed assessment criteria used to determine landscape and visual sensitivity, magnitude of change and significance of effect are set out in **Technical Appendix 6.1: Landscape and Visual Impact Assessment Criteria**. The approach to the assessment of cumulative effects is set out in subsequent sections of this chapter. The approach to the residential visual amenity assessment is set out in **Technical Appendix 6.6: Residential Visual Amenity Assessment (RVAA)**. The approach to the assessment of effects on Special Landscape Qualities of the Assynt Coigach NSA is set out in **Technical Appendix 6.7: Assessment of Effects on Special Landscape Qualities** and the approach to the assessment of visible aviation lighting is set out in **Technical Appendix 6.8: Assessment of Night-time Lighting: Assessment Criteria and Methodology**.

Assessment Limitations

- 6.71 The assessment of effects within this LVIA has been derived through the use of publicly available information only. Within such a large study area it is unfeasible to visit every individual location from which the revised development might be visible as illustrated on the ZTVs. The authors of the LVIA have, however, spent a considerable length of time 'in the field' and visited all important viewpoints and locations within the detailed 20km LVIA study area.
- 6.72 Limitations to the use of ZTVs and in relation to photography, wirelines, and photomontages is set out in **Technical Appendix 6.2: ZTV and Visualisation Information**.

Baseline Conditions

- 6.73 For the avoidance of doubt all distances are approximate and have been measured from the receptor to the nearest proposed turbine unless otherwise stated.

Current Baseline

Site Location

- 6.74 The Site, which is actively managed for commercial coniferous forestry, lies in the Sutherland area of the Highlands.
- 6.75 The closest densely populated settlement: the village of Lairg, lies approximately 21.9km³⁷ to the south-east. Residences are largely limited to scattered properties, or small property clusters such as at Overscaig, Shinness, Achnairn, Tirryside, and Altnaharra. The closest property is located approximately 3km from the nearest proposed turbine. The former Overscaig Hotel (now a dwelling) is sited close to the shoreline of Loch Shin over 3km west of the nearest proposed turbine.
- 6.76 The topography of the Site is undulating, with the lowest points being located along the roadside of the A838 as it passes Loch Shin. Land here extends to approximately 100m - 105m AOD. Land along the eastern boundary routes through Glen Fiag; following the course of the River Fiag as it flows into Loch Shin. The remainder of the Site broadly ascends to the peak of Meall Odhar (285m AOD), which is located near the north-western corner

³⁷ When measured from the centre point of the Site

of the Site. The Site incorporates moorland and coniferous forestry associated with the Fiag Plantation.

- 6.77 A number of unnamed watercourses run in a generally easterly direction across the Site, draining into the River Fiag. The River Fiag drains into Loch Shin which lies approximately 1.2km from the Site boundary.
- 6.78 The nearest main road is the A838 which runs adjacent to the southern boundary of the Site. The Site is accessed from the A838 near Fiag Bridge. The A838 is a major road in Sutherland which runs generally northwest from the A836 in the Lairg area to Tongue.
- 6.79 The Site lies approximately 7.5km to the south-west of the Creag Riabhach (22 turbines, 125m to tip) and Creag Riabhach Extension Wind Farm (3 turbines, 149.9m to tip). The consented Sallachy Wind Farm (9 turbines, 149.9m to tip) lies approximately 3km to the south-west of the Site, whilst the Shinness Wind Farm (16 turbines, 200m to tip) that is currently in the application stage is located approximately 5km to the north-west. A planning application for a single turbine extension to the consented Sallachy Wind Farm has recently been submitted. A smaller individual turbine is present at Overscaig Hotel. The Site is further influenced by views of electricity pylons and poles carrying overhead lines.
- 6.80 The location of the Site is illustrated on **Figure 1.1a** and the layout of the Site with the proposed turbine locations and associated infrastructure shown on **Figure 3.1**.

Landscape Designations

- 6.81 A review of all landscape designations within the initial 45km LVIA study area has been undertaken. Landscape designations within 45km are illustrated on **Figure 6.10**, with those within 20km additionally shown on **Figure 6.11**.

International/National Landscape Designations

- 6.82 There are no national landscape designations covering the Site. As illustrated by **Figure 6.10**, there are a number of National Scenic Areas (NSA) within the 45km study area, namely:
- Assynt - Coigach NSA, approximately 9.5km to the west.
 - North – West Sutherland NSA, approximately 18km to the north-west.
 - Kyle of Tongue NSA, approximately 19km to the north-northeast.
 - Dornoch Firth NSA, approximately 33km to the south-east.
- 6.83 Effects on NSAs are considered within the preliminary assessment of LCTs and Designated Sites in **Technical Appendix 6.3** to determine which have the potential to experience significant effects and require detailed assessment. Of the NSAs located in the study area, the Assynt - Coigach NSA has been identified as the only one requiring further analysis and assessment. A brief description and outline of its special qualities is listed below, with a detailed assessment of potential effects on its special landscape qualities presented in **Technical Appendix 6.7**.

Assynt - Coigach NSA

- 6.84 The Assynt - Coigach NSA lies approximately 9.5km to the west of the Site at its closest point; extending beyond the western coast of Scotland. According to NatureScot³⁸, the NSA is described as *"Steep hills with idiosyncratic profiles rise from hummocky surroundings in some of the most rugged and spectacular scenery in Scotland."*
- 6.85 The description of the NSA goes on to state that *"To the east Ben More Assynt, lying east of the Moine Thrust, has a different character deriving from its different geological history. Its vaster bulk and wild, rugged grandeur form the backdrop to the drama of the peaks of Assynt and Coigach, mirrored as they are in tranquil weather in the lochs as Assynt, Veyatie, Sionascaig and Lurgainn."*
- 6.86 Assynt - Coigach NSA special qualities are listed as follows:
- *"Spectacular scenery of lone mountains*
 - *Rocky topography of great variety*
 - *Settlements nestled within a wider landscape of mountain peaks, wild moorlands, and rocky seascapes*
 - *Extensive cnocan landscapes*
 - *A coastline of endless drama*
 - *An intricate multitude of lochs and lochans*
 - *A landscape of vast open space and exposure*
 - *Significant tracts of wild land*
 - *Unexpected and extensive tracts of native woodland*
 - *A still, quiet landscape under a constantly changing sky"*

Local Landscape Designations

Local Landscape Areas

- 6.87 THC has identified 27no. Special Landscape Areas (SLAs), which it notes are landscapes identified to protect and enhance landscape qualities and promote their enjoyment. For each of the SLAs, THC has produced citations; contained within the Assessment of Highland Special Landscape Areas which set out the key landscape and visual characteristics, special qualities, sensitivity to change and potential for landscape enhancement and other interests.
- 6.88 It should be noted that the term 'Local Landscape Area' (LLA) follows Scottish Government policy and is the name for local landscape designations in Scotland. Some local authority policy and guidance documents may still refer to previous names such as 'Special Landscape Area', which is the term used in existing Highland Council policy documents. For the avoidance of doubt, the term 'Local Landscape Area' (LLA) has been used in this chapter.
- 6.89 There are 7no. LLA within the 45km study area. As illustrated by **Figure 6.10**, only Ben Klibreck and Loch Choire LLA are located within the 20km detailed study area, as illustrated by **Figure 6.11**. LLAs within the 45km study area include:

³⁸ NatureScot (2010) Assynt - Coigach NSA. Available at: <https://sitelink.nature.scot/site/9119>

- Ben Klibreck and Loch Choire LLA, approximately 9.5km to the east-northeast.
- Bens Giam and Loch nan Clar LLA, approximately 28km to the north-east.
- Eriboll East and Whiten Head LLA, approximately 28km to the north.
- Fannichs, Beinn Dearg and Glencalvie LLA, approximately 28km to the south-southwest.
- Loch Fleet, Loch Brora and Glen Loth LLA, approximately 36km to the south-east.
- Oldshoremore, Cape Wrath and Durness LLA, approximately 37km to the north-northwest.
- Farr Bay, Strathy and Portskerra LLA, approximately 45km to the north-east.

6.90 Effects on LLAs are considered within the preliminary assessment of LCTs and Designated Sites in **Appendix 6.3** to determine which have the potential to experience significant effects and require detailed assessment.

6.91 Of the LLAs located in the study area, the Ben Klibreck and Loch Choire LLA has been identified as requiring further analysis and assessment. The key landscape and visual characteristics of Ben Klibreck and Loch Choire LLA and an outline of its special qualities is listed below, with a detailed assessment of potential effects, set out in subsequent sections of this chapter.

Ben Klibreck and Loch Choire LLA

6.92 Ben Klibreck and Loch Choire LLA lies approximately 9.5km to the north-east of the Site. As set out in the Assessment of Highland Special Landscape Areas, the key landscape and visual characteristics of Ben Klibreck and Loch Choire LLA are as follows:

- *“A very large-scale, open and exposed landscape in which a prominent, high isolated mountains rise conspicuously from the surrounding moorland with its very distinctive profile. The contrasting lower, hill massif is characterised by less distinctive landforms. Exceptional panoramic views are available from the high ridges and summits in clear conditions. Remote lochs occupy the trough between the mountains.*
- *At a broad level the landform is very simple. However at a more detailed level there is a diversity of upland habitats characterised by mosaics of heathland and grassland, with frequent rocky outcrops, screes and crags. Fragments of broadleaf woodland also occur on the lower ground that provides shelter.*
- *Pockets of gently sloping improved pasture fringe the shores of the two main lochs scattered with mature trees and stone sheepfolds. Occasional coniferous plantations appear particularly incongruous, contrasting in shape, colour and texture. This incongruity is particularly prominent when viewing from the isolated hill tops and distracts from the open panoramas seen from these areas.*
- *The isolated mountains, the lowland enclosed between them, the open moorland, and the extremely sparse settlement all contribute to a very strong sense of wildness within this area.”*

6.93 The headline special qualities of Ben Klibreck and Loch Choire LLA are listed as follows:

- Distinctive mountains.
- Secluded Glen with Network of Tracks.
- Extensive Views from Peaks and Summits.
- Historic Landscape.

World Heritage Sites

6.94 It is noted that the Site is located within the Flow Country World Heritage Site (WHS), which has been awarded designation by the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

6.95 The Flow Country, which relates to an extensive area of blanket bog, sheltered straths, moorland, and mountains encompasses much of Caithness and Sutherland. Whilst the Flow Country influences the landscape baseline, and therefore the assessment of potential effects, the WHS is not a landscape protection designation, nor does it have any statutory status in this regard.

6.96 Where relevant, potential effects are considered further within **Chapter 8: Ecology**.

Gardens and Designed Landscapes

6.97 As shown on **Figure 6.11**, there are no Gardens and Designed Landscapes (GDL) within 20km of the Site. Between 20km and 45km there are a number of GDLs, which are illustrated on **Figure 6.10**. GDLs within the 45km study area include:

- Tongue House GDL, approximately 35km to the north-east.
- Skibo Castle GDL, approximately 40km to the south-east.
- Dunrobin Castle GDL, approximately 42km to the south-east.
- Leckmelm GDL, approximately 42km to the south-west.

6.98 Given the distance from the revised development and the very limited theoretical visibility from the GDLs, there is considered to be no potential for significant effects from the revised development to arise. As a result, effects on GDLs in the study area are not considered further within the assessment.

Wild Land

6.99 Wild Land Areas (WLAs) are mapped and described by NatureScot³⁹.

6.100 As shown on **Figures 6.10 and 6.11**, the Site is close to a number of wild land areas, including:

- WLA 37. Foinaven - Ben Hee, which lies adjacent to the northern site boundary.
- WLA 34. Reay – Cassley, approximately 1km to the west.
- WLA 35. Ben Klibreck – Armine Forest, approximately 8km east.

³⁹ NatureScot (2022) Landscape Sensitivity Assessment Guidance (Methodology). Available at: <https://www.nature.scot/doc/landscape-sensitivity-assessment-guidance-methodology>

- 6.101 The matter of wind energy and Wild Land is addressed in Policy 4, 'g' of the National Planning Framework 4 which states that:

"Buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration".

- 6.102 As the Site does not lie within the extents of a WLA, effects on WLA's are not considered further within the assessment.

Published Landscape Character Descriptions

- 6.103 A review was undertaken of the following published sources of information regarding regional and local landscape character, landscape value, and landscape sensitivity:

- NatureScot National Landscape Character Assessment⁴⁰.
- Highland Council OWESG.

- 6.104 NatureScot guidance⁴¹ advises that any topic-specific landscape sensitivity studies should take precedence over the National Landscape Character Types. The study area is not covered by such a sensitivity study. Therefore, NatureScot's 2019 national landscape character assessment (LCA) has been used as the basis for the assessment of effects on landscape character.

- 6.105 At this point, for clarity, it is necessary to distinguish between two terms that are frequently used in published guidance and this chapter. They originate from the Guidelines for Landscape Character Assessment⁴²:

- Landscape Character Types (LCTs) are defined as tracts of landscape, which have a generic unity of character due to the particular combinations of landform, land cover, pattern and elements. The same landscape character type can occur at several different locations throughout a study area.
- Landscape Character Areas (LCAs) are defined as discrete geographical areas of a particular landscape character type and can only occur at a single location.

Landscape Character Types Covering the Site

- 6.106 With reference to **Figures 6.13 and 6.14**, the proposed turbines and the majority of the wind farm access tracks and associated infrastructure are located within LCT 134: Sweeping Moorland and Flows – Caithness & Sutherland, as defined by NatureScot.

- 6.107 This LCT occurs in other parts of the detailed 20km LVIA study area and as such has been subdivided into different units for the purposes of the assessment as follows: LCT 134: Sweeping Moorland and Flows – 'Strath Fiag/Tirry' unit covering the Site and land to the south-east only (the 'host' unit where the revised development would be located).

⁴⁰ NatureScot (2019) National Landscape Character Assessment. Available at: <https://www.arcgis.com/apps/webappviewer/index.html?id=e3b4fbb9fc504cc4abd04e1ebc891d4e&extent=-2030551.0017%2C6851563.2052%2C1100309.6769%2C8923312.4198%2C102100>

⁴¹ NatureScot (2023) Landscape Character Assessment in Scotland. Available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/landscape-character-assessment-scotland>

⁴² The Countryside Agency and Scottish Natural Heritage (2002) Landscape Character Assessment. Guidance For England and Scotland

6.108 The key characteristics of LCT 134: Sweeping Moorland and Flows – Caithness & Sutherland are described by NatureScot as:

- *“Gently sloping or undulating landform which lies generally below 350 metres.*
- *Occasional isolated hills of limited height form local landmark features.*
- *Lochs and mature, meandering rivers.*
- *Very distinct flora, dominated by sphagnum mosses, produced by the wetness and infertility of the flows.*
- *Areas of peat cuttings and haggings.*
- *Pockets of improved grazing, mainly within the outer fringes of sweeping moorland.*
- *Coniferous forest forming a dominant characteristic within some parts of this landscape character type.*
- *Ribbons of broadleaf woodland occasionally run along the water courses and loch edges.*
- *Very sparsely settled with dispersed crofts, farms and estate buildings largely found on the outer edges of this landscape or near a strath.*
- *Vehicular tracks within parts of the landscape.*
- *Wind farms, transmission lines, the A9 and a network of minor roads are key features within the more modified outer fringes within Caithness.*
- *Long, low and largely uninterrupted skylines offering extensive views across this landscape and result in a feeling of huge space.*
- *Consistent views to the distant Lone Mountains and Rugged Mountain Massif – Caithness & Sutherland.*
- *Great sense of exposure on areas of flat peatland on upland plateau.*
- *A strong sense of remoteness is associated within the largely uninhabited, inaccessible core flows and moorlands of this landscape.”*

6.109 In terms of perception, the following description has been provided by NatureScot:

“The landscape has a strong sense of naturalness and remoteness, particularly at its core away from more settled and modified outer fringes. Their distinctly natural character is heightened by a rich diversity of birds, including plover and curlew, whose evocative calls contribute to the perception of wildness.

The Sweeping Moorland and Flows forms the setting to the Lone Mountains, the distinctive form and prominence of these mountains being accentuated by the simple, open and expansive nature of the low-lying moorland which surrounds them. Some areas of flat peatland occur on areas of upland plateau, for example, Knockfin Heights and also on the top of cliffs along the north coast of Caithness. The elevation of these areas and their surrounding space creates an even great sense of exposure, particularly upon the edges of the landform, where distant views across land and sea are afforded.

Views are long with uninterrupted largely uninterrupted skylines. Rapidly changing light and weather conditions are reflected in the smooth vegetation cover and loch systems. The Sweeping Moorland and Flows are important in providing a simple foreground to views of distant Lone Mountains and Rugged Mountain Massif – Caithness & Sutherland,

complementing the distinctive form of these mountains and accentuating their height and prominence. Views from the A9 between Latheron and Spittal, the B871, A836 and from the A838 across the low-lying moorland of A'Mhoine to the distant mountains are particularly dramatic."

- 6.110 As noted in the above key characteristics, wind energy development is an established component of the baseline landscape character.
- 6.111 It is important to acknowledge that landscape and visual effects arising from a proposed wind farm are one factor weighed in the overall planning balance, set against the current renewable energy and planning policy context applicable at the time.

Other Landscape Character Types to be assessed

- 6.112 In order to consider the indirect effects of the revised development on landscape character, LCTs within 45km of the revised development have been illustrated on **Figure 6.13**, with those located within the detailed 20km LVIA study area illustrated on **Figure 6.14**. The LCTs within 20km have also been overlaid with the blade tip ZTV on **Figure 6.15**.
- 6.113 An initial filtering exercise has been undertaken to determine which LCTs would have the potential for significant effects to arise and would therefore require detailed consideration in this chapter. The intention has been to ensure that the level of attention given to each LCT is proportionate to the likelihood of significant effects arising. The discussion below summarises the process followed in deciding which LCTs have the potential to experience significant effects as well as those LCTs that do not require any further consideration.
- 6.114 With reference to **Figures 6.13 – 6.15**, all LCTs located between 20km and 45km have been scoped out of further assessment, on account of the distance from the revised development, the influence of other closer wind farm development and the relatively limited theoretical visibility. It is acknowledged that there may be potential for effects on the character of these LCTs but there would be no potential for significant effects to arise.
- 6.115 All LCTs present within the detailed 20km LVIA study area have been subject to an initial sieving exercise. The findings of this exercise are presented at **Table 6.3.1 of Technical Appendix 6.3: Preliminary Assessment of Landscape Character Types and Designations**.
- 6.116 The other LCTs assessed in detail in this chapter are:
 - LCT 135: Rounded Hills Caithness & Sutherland – including 'Loch Shin Rounded Hills' unit adjacent to the Site to the south-west and 'Loch Fiag Rounded Hills' unit approximately 1km to the north.
 - LCT 138: Lone Mountains – located approximately 9.5km to the north-east.
 - LCT 139: Rugged Mountain Massif – Caithness & Sutherland – located approximately 5km to the north-west.
 - LCT 142: Strath – Caithness & Sutherland – 'Strath Tirry' unit located approximately 11km to the south-east only.

Local Landscape Description and Character Appraisal

- 6.117 A plan illustrating the landscape features/ elements within the Site and its immediate context (within a 5km radius of the proposed turbines) is presented on **Figure 6.17**. The

following discussion provides an overview of the physical and perceptual characteristics of the Site and the immediately surrounding landscape without particular reference to published landscape character types.

Topography

- 6.118 Topography within 20km of the revised development is illustrated on **Figure 6.16**.
- 6.119 The topography of the Site and its immediate context is broadly characterised as flat, gently undulating, low-lying moorland that rises to form occasional isolated hills.
- 6.120 Within the Site itself, the topography is undulating, with the lowest points being located along the roadside of the A838 as it routes past Loch Shin. Land here extends to approximately 100m - 105m AOD. Land along the eastern boundary routes through Glen Fiag; following the course of the River Fiag as it flows into Loch Shin. The remainder of the Site broadly ascends to the peak of Meall Odhar (285m AOD), which is located near the north-western corner of the Site.
- 6.121 Beyond the Site, topography forms part of the wider chain of rolling moorland rounded hills, that gently give way to rugged lone mountains and mountain massifs.

Watercourses and Drainage

- 6.122 A number of unnamed watercourses run in a generally easterly direction across the Site, draining into the River Fiag. The River Fiag drains into Loch Shin which lies approximately 1.2km from the Site boundary.
- 6.123 In the wider surrounding landscape, a number of small tributaries also flow towards the River Fiag, which courses past the eastern extents of the Site; with further rivers, burns, and tributaries also draining surface water from the surrounding mountain landscapes into lochs.

Vegetation

- 6.124 The Site incorporates moorland and actively managed commercial coniferous forestry associated with the Fiag Plantation.
- 6.125 Scattered riparian vegetation, incorporating trees and scrub are present across the Site, along the course of unnamed watercourses and the River Fiag.
- 6.126 The Site is located immediately between further commercial coniferous forestry plantations and in proximity of the extensive Dalchork Wood, which is located beyond Strath Tirry to the east-southeast.
- 6.127 Further information on the habitats within the Site can be found in **Chapter 8: Ecology** and the relevant technical appendices.
- 6.128 Within the wider study area, there are further extensive coniferous forestry plantations and broadleaved woodlands. Riparian vegetation appears along watercourses, whilst occasional shelterbelts and small farm woodlands are present amongst the landscape, often in the proximity of scattered residential properties or dispersed communities.

Built Infrastructure

- 6.129 The majority of the Site does not feature any built infrastructure, except for existing forestry access tracks.
- 6.130 To the immediate east of the Site, an access track from the A838 facilitates access to Fiag Lodge on the loch shore of Loch Shin.
- 6.131 Within the wider landscape, there are numerous individual farmsteads and small groups of properties, villages, and occasional small towns, situated mainly within the more settled valley landscapes, with some properties located at slightly higher elevations along the main routes that pass through the area.
- 6.132 Within the detailed 20km LVIA study area, there are a limited number of main transport routes that include: the A838, which passes the southern and western extents of the Site; and the A836 that passes through the eastern portion of the study area over 5km from the nearest proposed turbine. The Far North Line is a mainline railway line that stops at Lairg Railway Station over 20km from the Site.
- 6.133 In addition to the primary routes, a limited number of B-class roads and minor roads also pass through the 20km study area. These include the B873 which passes Loch Naver over 15km to the north-east, and the B869 that is partly used to form the North Coast 500 Route over 20km to the north-west.
- 6.134 There are also several operational wind farms which lie within 20km of the Site. These include the Creag Riabhach, Rosehall, and Achany developments. Other wind farms within 45km are illustrated on **Figure 6.29**.

Sensory and Perceptual Characteristics

- 6.135 The peak of Meall Odhar and the onsite commercial coniferous forestry, form notable landscape features when seen in many views from the immediately surrounding landscapes.
- 6.136 Forestry largely restricts views from the Site, with only those limited elevated pockets of land around Meall Odhar allowing for broad sweeping views in all directions. Views from here extend across the surrounding low-lying moorland towards the nearby rugged lone mountains and mountain massifs, which provide the dramatic visual backdrop in views.
- 6.137 Within 10km of the Site, lies further commercial coniferous forestry plantations, the A838, the A836, scattered residential properties, dispersed property clusters, and the operational Creag Riabhach turbines. A smaller individual turbine is present at the former Overscaig Hotel. The Site is further influenced by views of electricity pylons and poles carrying overhead lines.
- 6.138 Whilst aspects of the Site exhibit some perception of remoteness and tranquillity, it is strongly influenced by its proximity to these other moderating influences that evidence human influence on the landscape.

Forces for Future Change in the Landscape

- 6.139 If the Site were not to be developed to accommodate the revised development, the land would largely remain in its present condition over the short-term.

- 6.140 Over the medium and longer term, the main foreseeable forces for change in the landscape onsite, and immediately surrounding the Site, relate to changes to the coniferous forestry plantations, with areas of felling and replanting in line with forest management plans. Further changes may also occur due to changes in traditional forms of moorland management, which may change over time, such as by introducing longer rotations between burning, or changes to vegetation resulting from re-wetting or rewilding to encourage greater habitat diversity.
- 6.141 Within the wider landscape, there are several commercial wind energy developments and several consented developments which, if built, would also influence the existing nature of the wider landscape surrounding the revised development as set out in the Cumulative Assessment (see **Assessment of Cumulative Effects**). In relation to operational wind energy developments, it is recognised that some may be subject to applications for repowering, but that decommissioning would be the default.
- 6.142 In addition to the consented or revised developments within the vicinity of the Site, it is widely recognised that climate change will have an impact on the future character of the Scottish landscape through changes to weather conditions that will in turn result in changes to vegetation that will affect the intrinsic character of the landscape.
- 6.143 Other pressures that may cause change in the baseline landscape and visual context in the future may include built development along infrastructure corridors and trunk roads, and potential settlement expansion at existing villages and towns.

Visual Receptors

- 6.144 With reference to the blade tip ZTVs at **Figure 6.3** and **6.4**, theoretical visibility extends approximately 9km to the north before higher landform near Ben Hee restricts visibility. Theoretical visibility extends approximately 10km to the north-west, where higher landform to the west of the A838 restricts visibility; however, some theoretical visibility is possible to distances up to approximately 13km from higher land, including from Ben More Assynt to the north-west and Beinn Leoid to the west. Theoretical visibility extends approximately 7km to the south-west, limited by rising land south-west of Loch Shin; although, scattered theoretical visibility is possible from higher land beyond. Theoretical visibility extends up to approximately 10km to the south, where higher land including Ben Sgeireach restricts visibility.
- 6.145 To the south-east, theoretical visibility extends along Loch Shin and towards Lairg, up to distances of approximately 23km. There is notably no theoretical visibility along Strath Tirry between the A838 and A836. Theoretical visibility extends up to approximately 14km to the east, restricted by higher land including Ben Klibreck and the smaller peaks of Meall Meadhonach and Creag Riabhach na Greighe. To the north-east, theoretical visibility extends up to approximately 9km, limited by higher land, including the peaks of Meall an Fhuarain, Creag Riabhach, and Meall an Amairich.
- 6.146 Some sporadic theoretical visibility is possible from areas of higher ground within the wider 45km study area, which include the peaks of Ben Hope and Ben Loyal to the north and north-east, as well as from Carn a Choin Deirg to the south.
- 6.147 It was determined that there was no potential for the revised development to result in any significant visual effects at distances over 20km from the Site as with increased distance from the Site, the likelihood of significant visual effects occurring incrementally decreases. Therefore, whilst the initial study area for this LVIA extends out to 45km and the various figures which accompany this chapter illustrate an initial 45km study area (as agreed with

the statutory consultees at scoping), the assessment has focused on visual receptors within a detailed 20km LVIA study area.

- 6.148 Interpretation of the ZTVs (**Figures 6.3 – 6.8** and the ZTV quadrants at **Figures 6.21 – 6.28**) assisted in identifying potentially sensitive visual receptors. Principal visual receptors within the surrounding landscape are illustrated on **Figures 6.18** and **6.19** and are identified below.
- 6.149 As set out within **Technical Appendix 6.4**, an initial filtering exercise has been undertaken to identify which visual receptors have the potential to be significantly affected by the revised development. In conclusion, the following visual receptors will be considered further within the LVIA:

Residential Receptors and Settlements

- Aultnacoarach – located approximately 4.7km to the south-east.
- Shinness – located approximately 8.75km to the south-east.
- Achnairn – located approximately 12.25km to the south-east.
- Tirryside – located approximately 14.5km to the south-east.
- Lairg – located approximately 18.5km to the south-east.

Recreational Receptors

- Core Path SU16.03 Ord Hill – located approximately 19km to the south-east.
- Core Path SU16.10 Loch Craggie – located approximately 18.75km to the south-east.
- Core Path SU16.05 Loch Shin Hide – located approximately 15.75km to the south-east.
- John O'Groats Cycle Route – located approximately 6km to the east at its closest point.

Road receptors

- A838 – located approximately 850m to the south at its closest point.
- A836 – located approximately 6km to the east at its closest point.
- A839 – located approximately 19km to the south-east at its closest point; and
- Moray Firth Tourist Route – located approximately 19km to the south-east at its closest point.

- 6.150 In addition to the above, seven residential properties are considered within the accompanying Residential Visual Amenity Assessment (RVAA) which is set out in **Technical Appendix 6.6**.

Assessment Viewpoints

- 6.151 The following table sets out the viewpoints considered as part of this assessment. These viewpoints have been derived through desk-based analysis, site visits, interpretation of ZTVs, and through consideration of the viewpoints used in the assessment of other nearby wind farms. The assessment viewpoints have also been consulted on as part of the EIA scoping process and amended following feedback received, as set out in **Table 6.1** above.

6.152 The viewpoints are representative of a range of views towards the revised development. They are not intended to cover every single view but are representative of a range of distances from the Site and receptor types (e.g. residents, walkers, road users). They have been used to inform the assessment of effects on landscape character, the visual assessment, the cumulative assessment, and the assessment of visual receptor groups.

6.153 **Table 6.4: Assessment Viewpoints** below identifies the 20no. agreed assessment viewpoints. The locations of these viewpoints are illustrated on multiple LVIA figures.

Table 6.4: Assessment Viewpoints

Viewpoint	OS Grid Reference	Approximate Distance to Nearest Turbine	Receptor Type
1: A838 near Fiag Bridge (N)	E246776, N920438	1,089m (T15)	Road users
2: Loch Fiag	E245506, N927664	2,360m (T1)	Recreational
3: A838 near Overscaig Hotel (N)	E241749, N923235	3,419m (T5)	Residential and road users
4: A838 near Sithean Dubh Mor	E250282, N918703	4,737m (T15)	Road users
5: A836 near Crask Inn	E252383, N924718	6,367m (T13)	Road users
6: Maovally	E237829, N921196	7,733m (T8)	Recreational
7: Ben Hee	E242655, N933918	8,666m (T1)	Recreational
8: Arscaig	E250911, N914167	8,566m (T15)	Residential and Recreational
9: A838 near West Shinness Lodge	E252804, N915452	8,762m (T15)	Residential and road users

10: Ben Sgeireach	E245352, N911826	9,709m (T15)	Recreational
11: A836 Rhian Bridge	E256313, N916632	10,997m (T15)	Road users
12: Ben More Assynt	E231838, N920055	13,825m (T8)	Recreational
13: Ben Klibreck (Meall nan Con)	E258515, N929883	14,078m (T2)	Recreational
14: A836 near An t-Sron (N)	E256986, N908513	16,710m (T15)	Road users
15: The Ord	E257327, N905602	19,247m (T15)	Recreational
16: Torroble* (N)	E259231, N904250	21,454m (T15)	Residential and road users
A: Beinn Leoid*	E232050, N929470	13,187m (T1)	Recreational
B: Ben Hope*	E247740, N950150	24,869m (T1)	Recreational
C: Ben Loyal*	E257623, N948252	26,153m (T2)	Recreational
D: Càrn a' Choin Deirg*	E239742, N892386	298,48m (T15)	Recreational

* Additional LVIA Viewpoint added following feedback received at scoping.

(N) Night-time visualisation produced from this viewpoint in addition to day-time visualisation.

6.154 **Technical Appendix 6.5: Viewpoint Assessment** provides a baseline description of the view from each assessment viewpoint, followed by a detailed analysis and assessment of the effects.

Assessment of Potential Effects

- 6.155 Following a brief summary of the revised development, this section of the LVIA considers the effects of the revised development on the physical features of the Site (landscape fabric), landscape character, and visual amenity. It considers the effects during the construction and operational phases of the revised development.
- 6.156 Effects during the construction phase are considered to be temporary and would have a short duration. Effects associated with the operational phase of the revised development are considered to be long-term, reversible effects.

Revised Development

- 6.157 A detailed description of the revised development is set out in **Chapter 4: Project Description**. The description below summarises those details of the revised development that have particular relevance to this LVIA.
- 6.158 The revised development would comprise the following visible features which may have an impact on landscape character or visual amenity:
- 15no. wind turbines including 9no. of up to 200m to tip height (hub height 119m, rotor diameter 162m used for modelling) and 6no. turbines of up to 230m to tip height (hub height 149m, rotor diameter 162m used for modelling). The proposed turbines would be three-bladed horizontal axis machines; the finish and colour of the turbines would be semi-matt and pale grey in colour).
 - Visible, medium intensity (minimum 2000 candela (cd)/ 200cd at horizontal and slightly above) steady red aviation warning lights on the nacelles of six of the 15no. proposed turbines. There would be no intermediate tower lights.
 - Associated turbine compound areas including foundations and crane hardstanding areas adjacent to each turbine.
 - New on-site access tracks, and upgrade of 4.93km of existing forestry tracks.
 - An on-site 132kV substation.
 - Substation, and on-site underground cables linking the turbines to the substation.
 - Energy storage compound.
 - Two watercourse crossings, and other drainage attenuation measures, as necessary.
 - Up to three borrow pit search areas.
 - Temporary construction and storage compounds and ancillary infrastructure.
- 6.159 The revised development would have construction, operation, and decommissioning phases, with an operational lifetime of 35 years.

Forestry

- 6.160 The revised development is situated within an active commercial coniferous forestry plantation, dominated by a mixture of sitka spruce and lodgepole pine.
- 6.161 As a result of the revised development, areas of the commercial coniferous forestry plantation would require to be felled to better accommodate the proposed turbines, including the infrastructure footprint, access tracks, turbine hardstanding areas, the 132kV substation and the battery storage compound.

- 6.162 In addition, large areas of the commercial coniferous forestry plantation, whilst retained during the initial phases of the revised development, would require to be felled during the operational phase of the revised development for forestry management purposes. These areas would however be replanted with mainly mixed conifer tree species. The extent of retained and replanted forestry within the Site is shown on **Figure 14.3: With Wind Farm Replanting Plan**. Any areas subject to felling to accommodate the revised development during the construction phase would be “open” for approximately two years until the new forestry is planted which would mature up to 2m in height over seven years.
- 6.163 Consideration has been given in the assessment to the management of forestry plantations on-site, and in the immediate surrounds. Beyond the confines of the Site, and when considering the information on ancient/ native woodlands provided in Scottish Forestry’s digital map (available to view online here: [Scottish Forestry Map Viewer](#)), there is an expectation that regular felling and replanting practices may influence how the Site and surrounds are experienced during various periods of time.
- 6.164 Whilst it is recognised that the felling cycles of coniferous forestry compartments in-and-surrounding the Site would alter the heights of different areas of forestry over time (potentially altering localised visual effects as a by-product), the assessment results are predicted to remain fairly consistent over the lifetime of the revised development as the pattern of forestry would remain relatively constant.
- 6.165 When considering future felling/ replanting operations on the Site specifically, it is important to recognise that the Applicant would have control of the coniferous forestry compartments. Further detail in relation to the proposed felling operations can be found in **Chapter 14: Forestry**.
- 6.166 So, whilst the assessments presented in this LVIA are largely based on current baseline conditions, it is acknowledged that future felling/ replanting operations on the Site, or in the immediate surrounds, may have a sufficient influence from certain locations and views. As a result, and to further understand localised effects, and the level of effect across the wider landscape, additional assessments pertaining to forestry felling have been included for each of the agreed viewpoints (see **Technical Appendix 6.5**) and from the properties in the RVAA study area (see **Technical Appendix 6.6**).
- 6.167 To support these assessments, visualisations illustrating the potential effects of the felling procedures across the initial nine-year period – as shown on **Figure 14.3** – have been prepared from the following viewpoints which all lie within 5km of the nearest proposed turbine: **Viewpoint 1: A838 near Fiag Bridge, Viewpoint 2: Loch Fiag, and Viewpoint 4: A838 near Sithean Dubh Mor** (see **Volumes 3 and 5**). Whilst **Viewpoint 3: A838 near Overscaig Hotel** also lies within 5km of the Site, a visualisation showing the potential effects of forestry planting has been excluded on the basis that there is limited prospect to view the on-site forestry owing to intervening landform and coniferous forestry outwith the control of the Applicant.

Effects during Construction on Existing Landscape Features

- 6.168 As identified in the baseline section, the existing landscape features present on the Site are:
- Commercial coniferous forestry plantation.
 - Moorland vegetation; and
 - Watercourse/ drainage channels.

- 6.169 The construction phase would result in the removal of commercial coniferous forestry plantation, through the construction of on-site access tracks, hardstanding areas, a substation and battery storage compound, on-site underground cabling, temporary borrow pit workings, construction compounds, and turbine foundations. Connecting underground electricity cables would generally follow access tracks.
- 6.170 The existing commercial coniferous forestry plantation would be removed to allow construction of foundations for the various elements. Soils stripped as part of the establishment works would be stored in accordance with established soil handling best-practice for use during reinstatement works on completion of construction activities. Areas of moorland to the north-west of the Site would not be disturbed.
- 6.171 According to **Chapter 4: Project Description**, up to three borrow pit search areas would be required. The final location, number, and estimate of material won from each search area would be determined once full ground investigation works, and testing has been completed. All of the borrow pits would be located within LCT 134: Sweeping Moorland and Flows. Their excavation would be short-term and would result in the removal of trees, vegetation, soils and subsurface rock. Borrow pit workings would be restored following construction to encourage replanting of commercial forestry; although, it is accepted that some regrading of the land profile would be expected.
- 6.172 Commercial coniferous forestry plantation is commonly found within the locality and within the surrounding landscape. It does not form part of the fabric of a site designated for its scenic value, and it is generally deemed as a feature with relatively limited landscape value. The proposed felling and replanting resulting from ongoing management practices, lowers its susceptibility. Combining its value and susceptibility results in the sensitivity of the on-site commercial coniferous forestry plantation being low.
- 6.173 The commercial coniferous forestry plantation would experience a medium to high magnitude of change resulting from the removal of forestry to accommodate the construction of new access tracks, laydown areas, crane pads, and turbine foundations, which would affect most of the overall plantation contained within the Site boundary extents. Some areas of forestry would be retained during the construction phase, particularly to the south close to the A838 and to the north and east. The overall level of effect on the commercial coniferous forestry plantation found on Site as a result of the revised development is predicted to be **moderate/ minor**, which is not considered to be significant.
- 6.174 Areas of moorland to the north-west would remain unaffected by the revised development.
- 6.175 A number of watercourse crossings would be required as part of the revised development, with existing crossing points utilised wherever possible. These features are considered to be of low value in landscape terms but highly susceptible to changes which affect their course or their quality. Combining their value and susceptibility results in the watercourse and drainage features found on Site as having a medium level of sensitivity.
- 6.176 The proposed turbines and associated infrastructure have been located away from any watercourses/ channels on the Site. It is therefore only in the location of the proposed watercourse crossings where there is potential for construction effects to occur. The River Fiag to the east of the Site would remain unaffected by the revised development.
- 6.177 As effects would be limited and controlled through best-practice construction and environmental practices, the predicted change would result in no greater than a low

magnitude change. As a result, effects are judged as being **moderate/ minor**, which is not considered to be significant.

Summary of Effects during Construction on Existing Landscape Features

- 6.178 The revised development would result in a **moderate/ minor** effect to the commercial coniferous forestry plantation found on Site. No effects are predicted upon moorland vegetation and there is judged to be no greater than a **moderate/ minor** effect to watercourses and drainage channels. These effects are all considered to be not significant.

Operational Effects on Existing Landscape Features

- 6.179 Most areas of removed commercial coniferous forestry plantation would be replanted following the construction phase. Whilst the replanting of similar coniferous species is unlikely to bring about beneficial changes to landscape character, it has the potential to result in long-term benefits in way of providing visual enclosure of access tracks, the substation, and the battery storage compound.

Assessment of Effects on Landscape Character

- 6.180 The LCTs covering the initial 45km LVIA study area are shown on **Figure 6.13**, and within the detailed 20km LVIA study Area at **Figure 6.14**. LCTs within 20km of the revised development overlaid with the blade tip ZTV are illustrated at **Figure 6.15**.
- 6.181 As explained in **Technical Appendix 6.3** and as set out in the baseline section, an initial filtering process has been carried out on all LCTs within the detailed 20km LVIA study area which identified that, in addition to the LCT in which the revised development is located, a further four LCTs have the potential to be significantly affected by the revised development. The LCTs assessed in detail in this assessment are:
- LCT 134: Sweeping Moorland and Flows – ‘*Strath Fiag/Tirry*’ unit covering the Site and land to the south-east only.
 - LCT 135: Rounded Hills Caithness & Sutherland – including ‘*Loch Shin Rounded Hills*’ unit adjacent to the Site to the south-west and ‘*Loch Fiag Rounded Hills*’ approximately 1km to the north.
 - LCT 138: Lone Mountains – located approximately 9.5km to the north-east.
 - LCT 139: Rugged Mountain Massif – Caithness & Sutherland – located approximately 5km to the north-west; and
 - LCT 142: Strath – Caithness & Sutherland – ‘*Strath Tirry*’ unit located approximately 11km to the south-east only.

Sensitivity of Landscape Character to Wind Energy Development

- 6.182 The first stage in assessing the effects of the revised development on landscape character is to evaluate the sensitivity of the LCTs brought forward into detailed assessment, to the type of change proposed. As indicated within GLVIA3, sensitivity of landscape character should be determined through a consideration of both susceptibility to change and any values associated with the landscape.

LCT 134: Sweeping Moorland and Flows (Strath Fiag/Tirry unit)

- 6.183 This LCT unit is covered by the Site and extends approximately 5km to the west, 10km to the east, and beyond 20km to the south-east. The unit features some large areas of coniferous forestry plantation in various stages of maturity, including within the Site, areas to the west along Loch Shin, and areas east of Strath Tirry. The LCT unit does however feature undulating areas of moorland predominately between Loch Shin/ A838 and the A836. The LCT unit features scattered properties and small settlements as well as overhead powerlines with associated pylons.
- 6.184 There are no landscape designations over most of the LCT unit; however, northern parts of the LCT unit are covered by the 37. Foinaven – Ben Hee WLA. The Ben Klibreck and Loch Choire LLA covers a very limited part of the unit to the north-east. On balance, the LCT unit is assessed as having a medium value.
- 6.185 Northern parts of the LCT unit are more remote and feature open areas of moorland. Due to the influence of coniferous forestry plantation and A-class roads crossing the LCT unit, it is assessed as having a medium susceptibility to the change proposed.
- 6.186 Combining the LCT unit's value and susceptibility results in a medium sensitivity to the change proposed.

LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit)

- 6.187 This LCT unit lies adjacent to the Site and extends to cover Loch Shin and the land to the north-west of Loch Shin. The land to the north-west of Loch Shin is mostly made up of open moorland featuring numerous rounded hills of differing steepness and height, interspersed by small lochs and watercourses. Areas of coniferous forestry plantation are relatively sparse, mostly located adjacent to Loch Shin. Development within the area is limited to scattered properties along Loch Shin, and near Rosehall and Achany wind farm. The pattern of the LCT unit continues beyond Glen Cassley and over 10km to the south-west of the Site.
- 6.188 Most of the LCT unit is covered by the 34. Reay – Cassley WLA, with the north-western boundary lying adjacent to the Assynt Coigach NSA. The LCT unit is assessed as having a high value.
- 6.189 The LCT unit is within an undulating, open, and remote landscape with limited influence of nearby development. With a sense of remoteness and wildness, the LCT unit is assessed as having a high susceptibility to the change proposed.
- 6.190 Combining the LCT unit's value and susceptibility results in a high sensitivity to the change proposed.

LCT 135: Rounded Hills Caithness & Sutherland (Loch Fiag Rounded Hills unit)

- 6.191 This LCT unit lies approximately 1km to the north at its closest point and extends up to 11km to the north and beyond 20km to the north-east. The area closest to the Site includes open steep sided hills surrounding Loch Fiag. The land further to the north-east is mostly made up of open moorland featuring numerous rounded hills of differing steepness and height, interspersed by small lochs and watercourses. Most of the Creag Riabhach Wind Farm is located within the LCT unit to the north-east, as well as coniferous forestry plantation following the A836.

- 6.192 Most of the LCT unit to the north of the Site is covered by the 37. Foinaven – Ben Hee WLA, with limited parts of the LCT unit to the north-east fringed by the 35. Ben Klibreck – Armine Forest WLA as well as the Ben Klibreck and Loch Choire LLA. The LCT unit is assessed as having a high value.
- 6.193 The LCT unit is within an undulating, open and remote landscape with limited influence of nearby development; however, partly influenced by nearby wind farm development. With a sense of remoteness and wildness, the LCT unit is assessed as having a medium to high susceptibility to the change proposed.
- 6.194 Combining the LCT unit's value and susceptibility results in a high sensitivity to the change proposed.

LCT 138: Lone Mountains

- 6.195 The LCT is made up of a series of steep hillsides, including the peaks of Creag an Lochain (808m AOD), Meall nan Con (961m AOD), Meall Ailean (724m AOD) and The Whip (566m AOD), located between Strath Vagastie and Loch Choire. The LCT does not feature any development within it.
- 6.196 All of the LCT is covered by the Ben Klibreck and Loch Choire LLA and the 35. Ben Klibreck – Armine Forest WLA. The LCT is assessed as having a high value.
- 6.197 The LCT is a remote upland landscape with a rugged nature that provides a strong sense of wildness and remoteness. Whilst influenced in-part by Creag Riabhach Wind Farm, the LCT is assessed as having a high susceptibility to the change proposed.
- 6.198 Combining the LCT's value and susceptibility results in a high sensitivity to the change proposed.

LCT 139: Rugged Mountain Massif – Caithness & Sutherland

- 6.199 The LCT is made of steep sided mountains set in between lochs, with the most notable peaks including Ben Hee (873m AOD) to the north, Beinn Leoid (792m AOD) to the north-west, and Ben More Assynt (998m AOD) to the west. The most notable development within the LCT is the A838 with occasional properties and coniferous forestry plantation aligning the route.
- 6.200 The LCT is covered by two WLAs, namely 34. Reay – Cassley WLA and 37. Foinaven – Ben Hee WLA. The LCT is also partly covered by the Assynt Coigach NSA. The LCT is assessed as having a high value.
- 6.201 The LCT is a remote upland landscape with a rugged nature that provides a strong sense of wildness and remoteness. The LCT is assessed as having a high susceptibility to the change proposed.
- 6.202 Combining the LCT's value and susceptibility results in a high sensitivity to the change proposed.

LCT 142: Strath – Caithness & Sutherland (Strath Tirry unit)

- 6.203 The LCT unit consists of lower lying gently undulating farmland and coniferous forestry plantation either side of the meandering River Tirry. The strath is settled and includes the small settlements of Achnairn and Tirryside, as well as being crossed by overhead powerlines with associated pylons close to Loch Shin and two A-class roads.

- 6.204 There are no landscape designations over the LCT unit, with the unit being influenced by the development within it. On balance, the LCT unit is assessed as having a medium to low value.
- 6.205 The LCT unit is influenced by the coniferous forestry plantation and the A-class roads crossing the area, as well as the settlement pattern including other minor roads connecting residential properties. It is assessed as having a medium susceptibility to the change proposed.
- 6.206 Combining the LCT's value and susceptibility results in a medium sensitivity to the change proposed.

Table 6.5: Landscape Character Sensitivity

Landscape Character Type (<i>unit</i>)	Value	Susceptibility	Sensitivity
LCT 134: Sweeping Moorland and Flows (<i>Strath Fiag/Tirry unit</i>)	Medium	Medium	Medium
LCT 135: Rounded Hills Caithness & Sutherland (<i>Loch Shin Rounded Hills unit</i>)	High	High	High
LCT 135: Rounded Hills Caithness & Sutherland (<i>Loch Fiag Rounded Hills unit</i>)	High	High/ medium	High
LCT 138: Lone Mountains	High	High	High
LCT 139: Rugged Mountain Massif – Caithness & Sutherland	High	High	High
LCT 142: Strath – Caithness & Sutherland (<i>Strath Tirry unit</i>)	Medium/ low	Medium	Medium

Effects on Landscape Character during Construction

- 6.207 The proposed turbines, substation, battery storage, access tracks and associated infrastructure would all be located within LCT 134: Sweeping Moorland and Flows (*Strath Fiag/Tirry unit*).
- 6.208 During the construction phase, there would be the temporary presence of cranes on the Site and the movement of other construction traffic, consistent with the formation of access tracks, hardstandings, turbine foundations, other associated infrastructure, and the installation of the turbines. Forestry within the coniferous plantation would also need to be removed to facilitate construction of the revised development, with select areas then replanted, as shown on **Figure 14.3**. Whilst the timetable for certain forestry management activities would be impacted as a result of the revised development, it is recognised that felling and replanting of trees is a regular occurrence at an active commercial forestry plantation, that would happen with/ without the revised development. As a result, this is considered to have less of a bearing on the magnitude of change and subsequent effect judgements presented below.
- 6.209 Effects during construction on landscape character would increase incrementally through the construction phase as more turbines, foundations, hardstandings, and ancillary elements are constructed. Construction activities would move from turbine location to turbine location and, as activities increased in one location, they would be decreasing at locations where construction activities had finished.

- 6.210 Cranes would be involved in the erection of the turbines, but these would be onsite for a relatively short period of time during the overall construction phase. The cranes would form noticeable vertical features in the landscape for a short period of time but would be a relatively diminutive visual component given their slender form compared with the turbines being erected.
- 6.211 There would be localised areas of high/ medium magnitude of change directly within the Site and up to 2km from the construction activity, within the LCT 134: Sweeping Moorland and Flows (*Strath Fiag/Tirry unit*) during the construction phase. This would result in a **moderate** temporary effect on part of the LCT unit where the revised development is located, which would be significant. The effects upon the LCT unit would be less where limited by the surrounding coniferous forestry plantation to the north-east and south-west.
- 6.212 The additional effects upon LCT 134: Sweeping Moorland and Flows (*Strath Fiag/Tirry unit*) during the construction phase beyond 2km would reduce to a low magnitude of change, which would result in a **moderate/ minor** temporary and not-significant effect.
- 6.213 Due to the proximity of both LCT 135: Rounded Hills Caithness & Sutherland (*Loch Shin Rounded Hills unit*) to the south and LCT 135: Rounded Hills Caithness & Sutherland (*Loch Fiag Rounded Hills unit*), no greater than a medium magnitude of change would occur within 2km of the LCT units. This would result in **moderate** temporary effects on both LCT units, which would be not significant. Beyond 2km, a low magnitude of change is predicted for both LCT units, resulting in **moderate/ minor** temporary effects, which would be not significant.
- 6.214 Construction activity would likely be visible from LCT 138: Lone Mountains due to the elevated location in comparison to the Site. At a distance of over 10km, a low/ very low magnitude of change is predicted, which would result in no greater than a **moderate/ minor** temporary additional not-significant effect.
- 6.215 Due to the intervening landform and other areas of coniferous forestry plantation, the influence of construction activity from elevated areas of LCT 139: Rugged Mountain Massif – Caithness & Sutherland, is predicted to result in a very low magnitude of change, resulting in a **minor** additional not-significant effect.
- 6.216 Due to the distance of LCT 142: Strath – Caithness & Sutherland (*Strath Tirry unit*) from construction activity and the network of intervening landform and vegetation, a very low magnitude of change is predicted, resulting in a **minor** temporary not-significant effect.
- 6.217 A summary of the effects on landscape character during construction is presented in **Table 6.6: Assessment of Effects on Landscape Character during Construction**. Note that for all character types stated within this table, the duration of the revised development is considered to be temporary.

Table 6.6: Assessment of Effects on Landscape Character during Construction

Landscape Character Type	Sensitivity	Magnitude of Change	Effect	Significant
LCT 134: Sweeping Moorland and Flows (<i>Strath Fiag/Tirry unit</i>)	Medium	High/ medium (including revised development and up to 2km)	Moderate	Yes

		Low (beyond 2km)	Moderate/ minor	No
LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit)	High	Medium (within 2km)	Moderate	No
		Low (beyond 2km)	Moderate/ minor	No
LCT 135: Rounded Hills Caithness & Sutherland (Loch Fiag Rounded Hills unit)	High	Medium (within 2km)	Moderate	No
		Low (beyond 2km)	Moderate/ minor	No
LCT 138: Lone Mountains	High	Low/ very low	Moderate/ minor	No
LCT 139: Rugged Mountain Massif – Caithness & Sutherland	High	Very Low	Minor	No
LCT 142: Strath – Caithness & Sutherland (Strath Tirry unit)	Medium	Very Low	Minor	No

Bold text indicates a significant effect.

Effects on Landscape Character during Operation

6.218 The effects on landscape character during the operational phase of the revised development are discussed below in relation to each of the LCTs brought forward into detailed assessment (refer to **Technical Appendix 6.3**). The magnitude of change on landscape character as a result of the revised development has been determined using professional judgement based on the following factors:

- The percentage of the character type from where the Site would theoretically and actually be visible.
- The distance between the LCT and the Site.
- The likely prominence of the turbines from the LCT taking account of existing locally dominant characteristics in the landscape character type; and
- The degree to which the physical and perceptual characteristics of the landscape would change as a result of the revised development.

- 6.219 To aid the consideration of the operational effects on landscape character, the LCTs within the detailed 20km LVIA study area have been overlaid with the blade tip ZTV in **Figure 6.15**.
- 6.220 Beyond the immediate environs of the Site, the ground level components of the revised development would not be discernible from lower-lying areas due to the locally elevated landform upon which the revised development would be located. Therefore, effects on landscape character, as experienced in the wider landscape, for most locations arise largely in relation to the introduction of the proposed turbines into the landscape and the resultant changes to the experience of landscape character.
- 6.221 It is acknowledged that there may be more elevated areas where ground-level elements may be visible, and these are considered within the assessment where relevant.
- 6.222 It is noted that in general, the magnitude of change in landscape character would incrementally decrease with distance from the proposed turbines as they become gradually less prominent.
- 6.223 A summary of the effects on landscape character during operation is presented in **Table 6.5: Assessment of Effects on Landscape Character during Operation**. Note that for all LCTs stated within this table, the duration of the revised development is considered to be long-term and reversible.

LCT 134: Sweeping Moorland and Flows (Strath Fiag/Tirry unit)

- 6.224 The revised development, including all 15no. proposed turbines, substation, battery storage and access tracks would be located within this LCT unit. Views from this LCT unit are broadly represented by **Viewpoints 1, 3, 4, 5, and 9** (see **EIAR Volumes 3 and 5**). The revised development is located to the north-west of this large LCT unit, with most of the LCT stretching alongside the north-eastern edges of Loch Shin and beyond.
- 6.225 With reference to **Figure 6.15**, which shows LCTs within 20km overlaid with the blade tip ZTV, there is extensive theoretical visibility of all proposed turbines across most of the LCT unit up to 20km from the Site. Actual visibility would however be reduced due to the coniferous forestry plantations within and near to the Site, as well as within the wider LCT unit.
- 6.226 Whilst the proposed turbines would represent a notable change to the immediate vicinity of the Site, their location within and close to large areas of coniferous forestry plantation, as well as their location on sloping ground within Glen Fiag, limits the landscape character effects to some degree. Despite the size and scale of the proposed turbines, referring to a representative viewpoint (**Viewpoint 3**), the intervening forestry and landform would reduce the influence of the revised development upon landscape character. From locations of more open moorland, referring to the representative viewpoints (**Viewpoint 1 and 4**), however, and despite the context of overhead powerlines with associated pylons featuring within the landscape, the revised development would become the single-most prominent characteristic feature.
- 6.227 The revised development would introduce a high/ medium magnitude of change upon the LCT unit that would extend to approximately 4km to the north and approximately 5km to the north-east, east, and south-east. Combined with the sensitivity of the LCT unit, this would result in a **moderate** and significant effect.
- 6.228 To the west of the revised development, a combination of landform and coniferous forestry plantation would limit the influence upon the LCT unit. Therefore, the revised development would introduce a medium/ low magnitude of change upon the LCT unit

that would extend to approximately 4km to the west. Combined with the sensitivity of the LCT unit, this would result in a **moderate/ minor** and not-significant effect.

- 6.229 Between 5km to 8km to the north-east, east and south-east, the influence of the revised development would reduce due to distance from the proposed turbines, with the revised development also not influencing those areas covered by coniferous forestry plantation to the east. Referring to a representative viewpoint (**Viewpoint 5**), within areas of open rolling moorland, the revised development would still have an influence upon the character of the LCT unit. Therefore, a medium magnitude of change would occur upon the LCT unit, which when combined with the sensitivity, would result in a **moderate** and significant effect.
- 6.230 Between 8km and 12km to the north-east, east, and south-east, large tracts of the LCT unit would not influence the landscape character due to the extents of coniferous forestry plantation. Areas of the LCT unit to the north-east would also be influenced by the proximity to Creag Riabhach Wind Farm. Therefore, the revised development would introduce no greater than a medium/ low magnitude of change upon the LCT unit, which when combined with the sensitivity, would result in a **moderate/ minor** not-significant effect.
- 6.231 Beyond 12km to the south-east, despite the theoretical visibility within the LCT unit as shown on **Figure 6.15**, most of the area is covered by coniferous forestry, therefore, limiting the influence upon landscape character. The revised development would introduce a very low magnitude of change upon the LCT unit, which when combined with the sensitivity, would result in a **minor** not-significant effect.

LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit)

- 6.232 The LCT unit is located adjacent to the Site and approximately 1km to the south and south-west of the proposed turbines, therefore any effect discussed below would be indirect. Views from the LCT unit are represented by **Viewpoints 6, 8, and 10** (see **EIAR Volumes 3 and 5**).
- 6.233 Referring to **Figure 6.15**, theoretical visibility is mostly concentrated within the northern part of the LCT within 10km of the revised development, with the pattern of hills limiting influence upon areas further to the south-west and south. Theoretical visibility does however extend along the length of Loch Shin up to a distance of approximately 18km. Apart from limited areas of coniferous forestry plantation along the edges of Loch Shin which would limit the influence of the revised development in these areas, it is considered that the actual visibility aligns with that shown on **Figure 6.15**.
- 6.234 Due to the relative open and remote nature of the landscape to the south-west of Loch Shin, the revised development would be a clearly noticeable feature within the landscape that would influence the physical and perceptual characteristics of the landscape within 5km of the proposed turbines to the south and south-west. The revised development would introduce a high/ medium magnitude of change upon the LCT unit at this distance. Combined with the sensitivity of the LCT unit, this would result in a **major/ moderate** and significant effect.
- 6.235 Due to the undulating and open nature of the landscape, the revised development would have the potential to influence those remote higher areas of the LCT unit, between 5km and 8km from the proposed turbines. When referring to a representative viewpoint (**Viewpoint 6**), which depicts the landscape character of the LCT unit, and whilst the Creag Riabhach Wind Farm and powerlines would be present on the opposing side of Loch Shin, the revised development would influence the physical and perceptual characteristics of

the landscape. The revised development would introduce a medium magnitude of change upon the LCT unit at a distance between 5km to 8km, including to the west, south, and south-east of the Site. Combined with the sensitivity of the LCT unit, this would result in a **moderate** and significant effect.

- 6.236 Between 8km to 12km, visibility of the revised development would be obscured by intervening rounded hills to the west and south-west. Vegetation along Loch Shin would serve to limit the influence of the revised development upon the LCT unit to the south-east (refer to **Viewpoint 8**). The revised development would influence the physical and perceptual characteristics of the landscape from higher locations (refer to **Viewpoint 10**). The revised development would introduce no greater than a medium/ low magnitude of change upon the LCT unit at a distance between 8km to 12km, including to the south and south-east of the Site. Combined with the sensitivity of the LCT unit, this would result in a **moderate/ minor** and not-significant effect.
- 6.237 Beyond 12km, due to the distance from the Site and the influence of other nearby wind farms, the revised development would introduce a low/ very low magnitude of change. Combined with the sensitivity of the LCT unit, this would result in a **minor** and not-significant effect.

LCT 135: Rounded Hills Caithness & Sutherland (Loch Fiag Rounded Hills unit)

- 6.238 The LCT unit is located approximately 1km to the north and approximately 1.5km to the north-east of the proposed turbines at its closest point, therefore any effect discussed below would be indirect. Views from the LCT unit are represented by **Viewpoint 2** (see **EIAR Volumes 3 and 5**).
- 6.239 Referring to **Figure 6.15**, theoretical visibility is mostly concentrated within western parts of the LCT unit closest to the revised development, with limited or no theoretical visibility beyond 8km. Apart from limited areas of coniferous forestry plantation along the A836, which would limit the influence of the revised development in these areas, it is considered that the actual visibility aligns with that shown on **Figure 6.15**. Areas within the LCT unit to the north-east of the Site are already influenced by Creag Riabhach Wind Farm.
- 6.240 Due to the relative open and remote nature of the landscape, the revised development would be a clearly noticeable feature within the landscape, appearing prominent and influencing those rounded hills closest to the Site. The influence of the revised development would be restricted by coniferous forestry plantation to the north-west of the Site and on opposing sides of hills, including north of Cnoc Maol na Cloiche Gil (405m AOD) and west of Cnoc a Ghriama (371m AOD). The revised development would introduce a high/ medium magnitude of change upon the LCT unit at this distance. Combined with the sensitivity of the LCT unit, this would result in a **major/ moderate** and significant effect.
- 6.241 Between 5km to 8km, the pattern of rounded hills would limit the influence of the revised development upon some areas of the LCT unit. Due to the elevated and remote nature of the landscape, the revised development would have the potential to influence the physical and perceptual characteristics of the LCT unit. To the north-east, however, the landscape would already be influenced by Creag Riabhach Wind Farm. The revised development would introduce a medium magnitude of change upon the LCT unit at a distance between 5km to 8km, including to the north and north-east of the Site. Combined with the sensitivity of the LCT unit, this would result in a **moderate** and not-significant effect.
- 6.242 Beyond 8km, there is limited theoretical visibility of the revised development, with the landscape already directly influenced by Creag Riabhach Wind Farm. The revised

development would introduce a very low magnitude of change, which when combined with the sensitivity of the LCT unit, would result in a **minor** and not-significant effect.

LCT 138: Lone Mountains

- 6.243 The LCT is located approximately 10km to the north-east of the proposed turbines at its closest point. Therefore, any effect discussed below would be indirect. Views from the LCT are represented by **Viewpoint 13** (see **EIAR Volumes 3 and 5**).
- 6.244 Due to the elevated nature of the steep sided hillsides, theoretical visibility of the revised development would be possible within south-western parts of the LCT, including from Creag an Lochain (808m AOD) and the peaks at Ben Klibreck, including Meall nan Con (961m AOD). Due to the intervening high land, most of the LCT to the north-east would however have no theoretical visibility. The LCT is already influenced by Creag Riabhach wind farm located adjacent to the A836 on lower ground to the south-west of the LCT.
- 6.245 Due to the influence of the Creag Riabhach Wind Farm in the foreground and at a distance of over 10km from the Site, the revised development would have relatively limited influence upon the physical and perceptual characteristics of the landscape. The revised development would introduce a low magnitude of change upon the LCT, which when combined with the sensitivity of the LCT, would result in a **moderate/ minor** not-significant effect.

LCT 139: Rugged Mountain Massif – Caithness & Sutherland

- 6.246 The LCT is located approximately 5km to the north-west of the proposed turbines at its closest point. Therefore, any effect discussed below would be indirect. Views from the LCT are represented by **Viewpoints 7, 12, and A** (see **EIAR Volumes 3 and 5**).
- 6.247 Referring to **Figure 6.15**, theoretical visibility is mostly sporadic in nature, concentrated upon higher areas of land, including from Ben More Assynt (see **Viewpoint 12**), Ben Hee (see **Viewpoint 7**) and Beinn Leoid (see **Viewpoint A**), as well as higher land to the west of the A838. Beyond these higher peaks, there is limited or no theoretical visibility of the revised development.
- 6.248 Due to the steep, open and remote nature of the landscape, the revised development would be a noticeable feature within the landscape that would influence the physical and perceptual characteristics of the landscape up to a distance of 9km from the proposed turbines. The revised development would introduce a medium magnitude of change upon the LCT at a distance between 5km to 9km, including to the north and north-west of the Site. Combined with the sensitivity of the LCT unit, this would result in a **moderate** not-significant effect.
- 6.249 Due to the distance of over 9km from the Site and intervening landform, the revised development would have relatively limited influence upon the physical and perceptual characteristics of the landscape. The revised development would introduce no greater than a medium/ low magnitude of change upon the LCT, which when combined with the sensitivity of the LCT, would result in a **moderate/ minor** and not-significant effect.

LCT 142 – Strath – Caithness & Sutherland (Strath Tirry unit)

- 6.250 The LCT is located over 10km to the south-east of the proposed turbines at its closest point. Therefore, any effect discussed below would be indirect. Views from the LCT are represented by **Viewpoints 11 and 14** (see **EIAR Volumes 3 and 5**).

- 6.251 When referring to **Figure 6.15**, theoretical visibility is limited over most of the LCT unit, with areas of coniferous forestry plantation to the north-east of the LCT unit limiting actual visibility of the revised development. The LCT is already influenced by overhead powerlines with associated pylons crossing the LCT unit close to Loch Shin, two A-class roads, and by small settlements with associated roads.
- 6.252 Due to the distance of over 10km from the Site along with intervening vegetation and buildings, the revised development would have relatively limited influence upon the physical and perceptual characteristics of the landscape. The revised development would introduce no greater than a low magnitude of change upon the LCT unit, which when combined with the sensitivity of the LCT unit, would result in a **moderate/ minor** and not-significant effect.
- 6.253 A summary table of the effects on landscape character types during operation is provided below at **Table 6.7: Assessment of Effects on Landscape Character during Operation**.

Table 6.7: Assessment of Effects on Landscape Character during Operation

Landscape Character Type (unit)	Approximate distance/ direction from revised development	Sensitivity	Magnitude of Change	Effect	Significant
LCT 134: Sweeping Moorland and Flows (Strath Fiag/Tirry unit)	4km to north and 5km to the north-east, east and south-east	Medium	High/ medium	Moderate	Yes
	4km to the west	Medium	Medium/ low	Moderate / minor	No
	5km to 8km to the north-east, east and south-east	Medium	Medium	Moderate	Yes
	8km to 12km to the north-east, east and south-east	Medium	Medium/ low	Moderate / minor	No
	Beyond 12km to the south-east	Medium	Very Low	Minor	No
LCT 135: Rounded Hills Caithness & Sutherland (Loch	Up to 5km to the south-west and south	High	High/ medium	Major/ moderate	Yes

Shin Rounded Hills unit)	5km to 8km to the west, south and south-east	High	Medium	Moderate	Yes
	8km to 12km to the south and south-east	High	Medium/ low	Moderate / minor	No
	Beyond 12km to the south-west and south-east	High	Low/ very low	Minor	No
LCT 135: Rounded Hills Caithness & Sutherland (Loch Fiag Rounded Hills unit)	Up to 5km to the north-west, north and north-east	High	High/ medium	Major/ moderate	Yes
	5km to 8km to the north and north-east	High	Medium	Moderate	No
	Beyond 8km to the north-east	High	Very Low	Minor	No
LCT 138: Lone Mountains	Beyond 10km to the north-east	High	Medium/ low	Moderate / minor	No
LCT 139: Rugged Mountain Massif – Caithness & Sutherland	5km to 9km to the north and north-west	High	Medium	Moderate	No
	Beyond 9km to the north-west and west	High	Medium/ low	Moderate / minor	No
LCT 142: Strath – Caithness & Sutherland (Strath Tirry unit)	Beyond 10km to the south-east	Medium	Low	Moderate / minor	No

Bold text indicates a significant effect.

Effects on Designated Landscapes

International/ National Landscape Designations

- 6.254 As set out in **Technical Appendix 6.3**, all NSAs, apart from Assynt - Coigach NSA, have been scoped out of the assessment. Detailed consideration of the potential effects upon the special landscape qualities of Assynt - Coigach NSA is set out in **Technical Appendix 6.7**.
- 6.255 The assessment upon five of the ten special landscape qualities of the Assynt – Coigach NSA judged that there would be no significant effects as a result of the revised development owing to distance and limited visibility, with any associative not significant effects occurring across a limited extent of the NSA, as evidenced by **Figures 6.31 and 6.34, and in Viewpoint 12 and Viewpoint A**.
- 6.256 Whilst the revised development would increase the presence of wind turbines in views and reduce the visual separation between the NSA and existing (more distant) wind farms, its presence is not judged to result in any significant effects on any of the five SLQs assessed in detail that contribute to the Assynt-Coigach NSA, or any cumulative effects, particularly when considering the future baseline conditions brought about by the consented wind farms that would be located between the NSA and the revised development.
- 6.257 It is acknowledged that the revised development would result in some limited influence upon views from the Assynt-Coigach NSA over the wider landscape, particularly from the most elevated locations; however, all the qualities would remain extant and still be experienced. As a result, the appendix concluded that the overall integrity of the NSA would not be compromised.

Local Landscape Designations

Local Landscape Areas (LLA)

- 6.258 The Ben Klibreck and Loch Choire LLA lies approximately 9.5km to the north-east of the Site at its closest point and extends beyond 25km of the Site.
- 6.259 As set out in **Technical Appendix 6.3**, and as illustrated by **Figure 6.12**, there would be some theoretical visibility within western parts of the LLA from higher ground, including from Creag an Lochain (808m AOD), the peaks at Ben Klibreck, including Meall nan Con (961m AOD) and from higher land to the south-west of Loch a Bhealaich. Due to the intervening high land in western parts of the LLA, theoretical visibility would however be very limited within other parts of the LLA, limited to the peaks of Meall a Bhata (583m AOD) approximately 18km from the Site, and Creag Choire Ghlais (705m AOD), Creag Mhor (713m AOD) and Maol Coire a Mhile (598m AOD), all over 25km from the Site.
- 6.260 As previously set out, the LLA has four special landscape qualities (SLQ), namely:
- Distinctive mountains.
 - Secluded glen with network of tracks.
 - Extensive views from peaks and summits.
 - Historic landscape.
- 6.261 Consideration of potential landscape and visual effects within the LLA has been undertaken in detail in other sections of this chapter. The landscape receptors considered were LCT 138: Lone Mountains, and LCT 135: Rounded Hills Caithness & Sutherland (Loch

Fiag Rounded Hills unit) which lie beyond 8km from the revised development. Visual effects from **Viewpoint 13: Ben Klibreck**, have also been considered in **Technical Appendix 6.5**. Whilst some adverse landscape and visual effects upon these receptors were identified as a result of the revised development, they were considered to be not significant.

- 6.262 It is considered that the revised development would have no influence upon select SLQs of the LLA, including '*Secluded glen with network of track*' or upon the '*Historic landscape*', mainly due to theoretical visibility being limited to higher land.
- 6.263 The revised development would not directly affect the '*Distinctive mountains*' or their immediate setting. When considering the distance of the revised development from the LLA, at approximately 9.5km or over, the revised development would not affect the appreciation of the mountains to the west nor influence any of the mountains further to the east. It is however acknowledged that the revised development may influence the appreciation of mountains from select distant locations surrounding the LLA, often seen in context of Creag Riabhach Wind Farm adjacent to the LLA.
- 6.264 When considering the '*Extensive views from peaks and summits*' SLQ, the revised development would only influence those peaks to the west of the LLA, with other peaks only experiencing limited glimpses at distances of over 18km away. Creag Riabhach Wind Farm lies adjacent to the LLA, with any views towards the revised development seen in context of its turbines and access tracks in the foreground.
- 6.265 In summary, whilst it is acknowledged that there would be some adverse, effects upon landscape character and visual amenity experienced from a small part of the LLA at distances over 8km, these were considered to be not significant. Similarly, whilst the revised development is predicted to exert some influence upon two out of four of the SLQ of the LLA, namely '*Distinctive mountains*' and '*Extensive views from peaks and summits*'; overall, there would not be significant effects upon the special qualities of the Ben Klibreck and Loch Choire LLA, with all the qualities remaining extant and still able to be experienced. As a result, the overall integrity of the LLA would not be compromised.

Assessment of Visual Effects

- 6.266 Effects on visual amenity arise from changes to views resulting from the introduction of the revised development. It comprises:
- An assessment of visual effects from the representative viewpoints brought forward into detailed assessment; and
 - An assessment of visual effects on receptor groups such as settlements, roads and railways, recreational routes, core paths, and recreational and tourism locations brought forward into detailed assessment.
- 6.267 The assessment of visual effects has been carried out through a combination of site visits and desk study using the ZTVs, wirelines, and photomontages (see **Volumes 2, 3, and 5**).
- 6.268 The assessment criteria for the approach to assessment of visual effects is set out in **Technical Appendix 6.1**. The approach and the methodology to the assessment of visible aviation lighting is set out in **Technical Appendix 6.8**.

Construction Effects

- 6.269 Construction activities associated with the revised development would be screened from large portions of the study area, due to local topography and surrounding commercial

coniferous forestry plantations. Activities would however be visible from elevated locations that allow views towards where the revised development is located, as well as being visible from the nearby A838.

- 6.270 From the A838 to the south and south-west of the Site, glimpses of construction activity are likely to be possible, as shown on **Viewpoint 1: A838 near Fiag Bridge and Viewpoint 4: A838 near Sithean Dubh Mor**. Views towards construction activity would give rise to visual effects due to the removal of commercial coniferous forestry plantation to facilitate the revised development; although, it is recognised that forestry directly adjacent to the A838 would be retained. Therefore, views are predicted to partly extend across the Site permitting views of construction activities and vehicular movements, in addition to the views of the cranes used to install the turbines. In these locations south and south-east along the A838, there would be a medium magnitude of change which would result in a **moderate** temporary effect during the construction phase, which would be not significant.
- 6.271 From those using Loch Fiag, due to the elevated location in comparison to the Site and the removal of commercial coniferous forestry plantation to facilitate the revised development, views towards construction activity would likely be possible, as shown on **Viewpoint 2: Loch Fiag**. There would be a medium magnitude of change to those using Loch Fiag, which would result in a **moderate** temporary effect during the construction phase, which would be not significant.
- 6.272 From elevated locations surrounding the Site, including from Maovally, Ben Hee, and Ben Squireach, views extend across the Site, which would permit views of construction activities and vehicular movements, in addition to the views of the cranes used to install the turbines, as shown in **Viewpoint 6: Maovally, Viewpoint 7: Ben Hee, and Viewpoint 10: Ben Squireach**. In these locations, there would be a medium magnitude of additional change which would result in a **moderate**, temporary effect during the construction phase which would be not significant.
- 6.273 From more distant elevated locations, including from Ben More Assynt, Ben Klibreck (Meall nan Con), and Beinn Leoid, construction activities and vehicular movements, in addition to the views of the cranes used to install the turbines, would be less apparent, as shown in **Viewpoint 12: Ben More Assynt, Viewpoint 13: Ben Klibreck (Meall nan Con) and Viewpoint A: Beinn Leoid**. In these locations, there would be a low magnitude of additional change which would similarly result in a **moderate/ minor**, temporary effect during the construction phase which would be not significant.
- 6.274 From all other remaining viewpoints, ground-level activities would be screened through a combination of landform and vegetation. In these locations, there is the prospect for visual effects to arise in relation to views of the cranes erecting the turbines. The cranes would however be visible for a relatively short period and would be incidental when considered in the context of the turbines being erected. It is therefore assessed that any views of these works would result in a very low magnitude of additional change and no greater than a **minor**, temporary effect which would be not significant.

Operational Effects

- 6.275 A detailed viewpoint assessment of the operational effects is presented at **Technical Appendix 6.5: Viewpoint Assessment**, and this considers the long-term visual effects during the operational phase of the revised development for each of the 20no. agreed viewpoint locations. Visual effects are considered during daylight hours, as well as during darkness hours.

- 6.276 For each of the assessment viewpoints, a short description is given of the baseline view, and a judgement is provided regarding the sensitivity of the key receptors likely to experience the view during daylight and darkness hours.
- 6.277 This is followed by a description of the features of the revised development that would be visible from that viewpoint. This includes a description of how many turbine hubs and blades would be visible and also, where relevant, whether any ground-level components of the revised development would be visible. For each viewpoint, there is a comment on how vegetation or topography would affect actual visibility of the proposed turbines.
- 6.278 A judgement is then provided of the magnitude of change that would be experienced at each viewpoint, the level of the effect on the view, with a statement provided to clarify whether the additional effect resulting from the revised development would be significant or not.
- 6.279 A summary of the sensitivity of the view, magnitude of change in the view, the level of effect and its significance, both during daylight and darkness hours is given in **Table 6.8: Assessment of Effects on Viewpoints during Operation**. A copy of the table is also included in **Technical Appendix 6.5: Viewpoint Assessment**.
- 6.280 Where a viewpoint is representative of more than one type of visual receptor, the assessment carried forward into **Table 6.8** represents the most sensitive receptor group represented by the viewpoint.
- 6.281 With reference to the Viewpoint Assessment (see **Technical Appendix 6.5**), it has been assessed that there would be a significant visual effect at 8no. of the 20no. representative viewpoints during daylight hours when considering the proposed against the existing baseline conditions. These are as follows:
- Viewpoint 1: A838 near Fiag Bridge.
 - Viewpoint 2: Loch Fiag.
 - Viewpoint 4: A838 near Sithean Dubh Mor.
 - Viewpoint 5: A836 near Crask Inn.
 - Viewpoint 6: Maovally.
 - Viewpoint 7: Ben Hee.
 - Viewpoint 8: Arscaig; and
 - Viewpoint 10: Ben Sgeireach.
- 6.282 It was further assessed that during the hours of darkness there would be a significant visual effect at 3no. of the 20no. representative viewpoints. These are as follows:
- Viewpoint 1: A838 near Fiag Bridge.
 - Viewpoint 2: Loch Fiag; and
 - Viewpoint 4: A838 near Sithean Dubh Mor.

Table 6.8: Assessment of Effects on Viewpoints during Operation

Viewpoints	Daylight Hours				Darkness Hours			
	Sensitivity	Magnitude of Change	Level of Effect	Significant	Sensitivity	Magnitude of Change	Level of Effect	Significant
1: A838 near Fiag Bridge (N)	Medium	High	Moderate	Yes	Medium/ low	Medium	Moderate	Yes
2: Loch Fiag	High	High	Major	Yes	High/ medium	High/ medium	Major/ moderate	Yes
3: A838 near Overscaig Hotel (N)	High/ medium	Medium/ low	Moderate/ minor	No	Medium	Low	Moderate/ minor	No
4: A838 near Sithean Dubh Mor	Medium	High/ medium	Moderate	Yes	Medium/ low	Medium	Moderate	Yes
5: A836 near Crask Inn	High/ medium	High/ medium	Major/ moderate	Yes	Medium/ low	Medium	Moderate	No
6: Maovally	High	High/ medium	Major/ moderate	Yes	High/ medium	Medium/ low	Moderate/ minor	No
7: Ben Hee	High	Medium	Moderate	Yes	High/ medium	Medium/ low	Moderate/ minor	No
8: Arscaig	High	Medium	Moderate	Yes	High/ medium	Medium/ low	Moderate/ minor	No
9: A838 near West Shinness Lodge	High/ medium	Medium/ low	Moderate/ minor	No	Medium	Low	Moderate/ minor	No
10: Ben Sgeireach	High	Medium	Moderate	Yes	High/ medium	Medium/ low	Moderate/ minor	No
11: A836 Rhian Bridge	High/ medium	Very low	Minor	No	Medium/ low	No change	No effect	No
12: Ben More Assynt	High	Medium/ low	Moderate/ minor	No	High/ medium	Low	Moderate/ minor	No
13: Ben Klibreck (Meall nan Con)	High	Low	Moderate/ minor	No	High/ medium	Very low	Minor	No
14: A836 near An t-Sron (N)	High/ medium	Low	Moderate/ minor	No	Medium/ low	Very low	Minor	No

Viewpoints	Daylight Hours				Darkness Hours			
	Sensitivity	Magnitude of Change	Level of Effect	Significant	Sensitivity	Magnitude of Change	Level of Effect	Significant
15: The Ord	High	Low	Moderate/ minor	No	High/ medium	Very low	Minor	No
16: Torroble (N)*	High/ medium	Low	Moderate/ minor	No	Medium/ low	Very low	Minor	No
A: Beinn Leoid*	High	Medium/ low	Moderate/ minor	No	High/ medium	Low	Moderate/ minor	No
B: Ben Hope*	High	Very low	Minor	No	High/ medium	Very low	Minor	No
C: Ben Loyal*	High	Very low	Minor	No	High/ medium	Very low	Minor	No
D: Càrn a' Choin Deirg*	High	Very low	Minor	No	High/ medium	Very low	Minor	No

Bold text indicates a significant effect.

* Additional LVIA Viewpoint added following feedback received at scoping.

(N) Night-time visualisation produced from this viewpoint in addition to day-time visualisation.

Assessment of Effects on Principal Visual Receptor Groups

- 6.283 This section considers the effects of the revised development on the visual receptor groups brought forward into detailed assessment (see **Technical Appendix 6.4: Preliminary Assessment of Visual Receptors** for details). Principal visual receptors are illustrated on **Figures 6.18 and 6.19**, with **Figure 6.20** illustrating the blade tip ZTV overlaid over the visual receptors located within the detailed 20km LVIA study area.

Construction Effects on Visual Receptor Groups

- 6.284 It is recognised that there would be some temporary visual effects during the construction phase of the revised development. The vast majority of noteworthy visual effects would be experienced within the local environs of the Site, with views from wider distances being commonly constrained by intervening landform and vegetation including coniferous plantation forestry and broadleaved woodland.
- 6.285 The construction works would be visible from a number of properties within the local landscape; however, views of the construction phase would largely be restricted to views of cranes appearing above intervening landform and vegetation. Ground-level components and activities would primarily be screened from view. These views would only be experienced for a relatively short duration during the construction phase, and within the context of the proposed turbines being constructed.
- 6.286 From most visual receptors, the cranes would be visible for a relatively short period and would be incidental when considered in the context of the turbines being erected. Overall, it is assessed that there would be a low magnitude of additional effect at most during construction. This would result in a **moderate/ minor**, temporary effect which would be not significant, and these effects need to be considered in conjunction with the operational effects identified below.
- 6.287 The exception to the above would be from select locations along the A838 up to approximately 8km from the revised development, as there is judged to be a medium magnitude of change which would result in a **moderate** temporary effect during the construction phase, which would be not significant.

Operational Effects on Visual Receptor Groups

- 6.288 Views of ground-level components and activities associated with the revised development would be limited to a relatively short radius around the Site and/or experienced from receptors at elevated locations. Except where indicated, the discussion below therefore relates primarily to views of the proposed turbines.

Residential Receptors

- 6.289 In accordance with the methodology set out in **Technical Appendix 6.1**, the sensitivity of residents at home is considered to be high during daylight hours. During darkness hours, the sensitivity of residents is considered to be medium, in accordance with the methodology set out in **Technical Appendix 6.8**.

Residential Properties within 4km

- 6.290 All properties located within a 4km distance of a proposed turbine have been assessed in detail within the RVAA (see **Technical Appendix 6.6: Residential Visual Amenity Assessment (RVAA)**). The properties subject to detailed assessment in the RVAA are as

illustrated on **Figure 6.6.1: Residential Data with Blade Tip ZTV** and **Figure 6.6.2: Residential Data with Hub Height Tip ZTV**.

- 6.291 In summary, of the 7no. properties assessed in detail, 1no. would experience a significant visual effect from either a part of their house, garden, or principal access route (Taigh Na Dreoilin/ East Overscaig).
- 6.292 It is concluded that when the experience from each property is considered that none of the residents of any occupied private property would experience such an overbearing or overwhelming effect on their visual amenity that their properties would become unattractive places in which to live.

Residential properties and settlements between 4km to 5km

Aultnacoarach

- 6.293 Aultnacoarach is an individual property adjacent to Allt na Caorach watercourse, located on elevated ground adjacent to the A838, located approximately 4.7km to the south-east of the nearest proposed turbine.
- 6.294 The property is orientated to face both north-east and south-west and therefore, the revised development would be seen at an oblique angle. All 15no. proposed turbines, including their hubs, would be visible and seen on the skyline. Whilst the revised development would be partly obscured by coniferous forestry and landform; it would be clearly noticeable within the landscape. When considering these factors, the revised development is judged to result in a high/ medium magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **major/ moderate**, significant effect during daylight hours.
- 6.295 Whilst the proposed aviation lights would be visible, occurring within an area with very few existing light sources, due to the low level of lighting intensity, the lights would appear as faint red dots against the backdrop of the sky. The change in lighting would occur in a part of the landscape with very few existing light sources. When considering these factors, the revised development is judged to result in a medium magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **moderate**, significant effect during darkness hours.

Residential Properties and Settlements within 5km to 15km

Shinness

- 6.296 Shinness consists of a small group of properties located close to Loch Shin along the A838 and along a minor road to the north-east of the road. The settlement is located approximately 8.5km to the south-east of the revised development and is dissected by an overhead powerline with associated pylons. Most of the residential properties are orientated in a south-westerly direction, facing the loch.
- 6.297 Most of the proposed turbines would be visible on the skyline, appearing relatively well spaced and seen above intervening landform. Those properties located along the A838 would have relatively filtered views towards the revised development due to the vegetation along the road and surrounding the properties.
- 6.298 The properties further to the north-east benefit from an open aspect. With more limited vegetation surrounding the properties and along the minor road, the revised development would be clearly noticeable on the skyline. When considering these factors, the revised

development is judged to result in a medium magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate**, significant effect during daylight hours.

- 6.299 Whilst the proposed turbine aviation lighting would be potentially visible, occurring within an area with very few existing light sources, due to the low level of lighting intensity, the lights would appear as faint red dots against the backdrop of the sky. When considering these factors, the revised development is judged to result in a medium/ low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during darkness hours.

Achnairn and Tirryside

- 6.300 The small settlements consist of scattered properties located along the A838 and other minor roads to the north-east. Achnairn is located approximately 12.25km to the south-east of the revised development, whilst Tirryside is located approximately 14.5km to the south-east. Both settlements are dissected by an overhead powerline with associated pylons.
- 6.301 Most views from the properties located adjacent to the A838 are surrounded by either vegetation within their gardens or located adjacent to areas of woodland along the road, which serve to filter views towards the revised development. Due to intervening landform, those properties to the north-east would have no view towards the revised development. When considering these factors, the revised development is judged to result in no more than a medium/ low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during daylight hours.
- 6.302 Whilst the proposed turbine aviation lighting would be visible from some properties, those properties further to the north-east would have no view of the proposed lighting. Despite being within an area with very few existing light sources, due to the low level of lighting intensity, the lights would appear as faint red dots against the backdrop of the sky. When considering these factors, the revised development is judged to result in a no greater than a low/ very low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during darkness hours.

Lairg

- 6.303 Lairg is a village located at the south-eastern end of Loch Shin, located approximately 18.5km to the south-east of the revised development. Lairg is enclosed by gently rising landform, which is located to the south-west, east, and north of the village.
- 6.304 There is no predicted theoretical visibility of the revised development within the main part of the village, including from along the A836, The Main Street, Manse Road, and Lochside. Some theoretical visibility occurs to the south of the settlement close to the junction of the A836 and A839 and Ord Place; however, most views towards the revised development would be filtered by Ferry Wood and Lairg Power Station. When considering these factors, the revised development is judged to result in no more than a low/ very low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during daylight hours.
- 6.305 Most of the main streets within Lairg include street lighting. Whilst the turbine aviation lights would result in a higher level of lighting intensity, any glimpses towards the nacelle turbine lighting would be seen in context of the streetlights in the foreground and be filtered by intervening vegetation and Lairg Power Station. As Lairg is located beyond 5km of the

nearest proposed lit turbine (circa 18.5km distance) the maximum nacelle lighting intensity that could be experienced would be 200cd. When considering these factors, the revised development is judged to result in a very low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during darkness hours.

Table 6.9: Assessment of Effects on Residential Receptors during Operation

Property/ Settlement	Daylight Hours			Hours of Darkness		
	Magnitude of Change	Effect	Significant	Magnitude of Change	Effect	Significant
Aultnacoarach	High/ medium	Major/ moderate	Yes	Medium	Moderate	Yes
Shinness	Medium	Moderate	Yes	Medium/ low	Moderate /minor	No
Achnairn and Tirryside	Medium/ low	Moderate /minor	No	Low/ very low	Minor	No
Lairg	Low/ very low	Minor	No	Very Low	Minor	No

Recreational Receptors

- 6.306 The following assessment focuses on recreational receptors, which includes core paths and long-distance footpaths and cycle routes. The section concentrates upon those receptors identified during the filtering exercise at **Technical Appendix 6.4: Preliminary Assessment of Visual Receptors**, as having the greatest potential to experience significant effects, and therefore requiring further analysis and assessment.
- 6.307 In accordance with the methodology set out in **Technical Appendix 6.1: Landscape and Visual Impact Assessment Criteria**, the sensitivity of recreational receptors can vary between medium and very high depending on the reason for which they are using the route. For the purposes of the assessment, a sensitivity of high has been assumed for each recreational receptor during daylight hours. In any instance where this is not the case, further detail and justification has been provided. During darkness hours, in accordance with the methodology set out in **Technical Appendix 6.8**, the sensitivity of recreational receptors is considered to be medium.
- 6.308 A summary of the effects is presented at **Table 6.10: Assessment of Effects on Recreational Receptors during Operation**.

Core Path SU16.03 Ord Hill

- 6.309 The core path is located approximately 19km to the south-east of the revised development. The core path offers a short loop to elevated ground, namely The Ord, which allows access to the chambered cairn. The path can be accessed from Ord Place to the south-west of Lairg.

- 6.310 As the core path rises up to The Ord, views become more open and panoramic, with the revised development visible along Loch Shin, seen partly above distant hills. The revised development would appear compact with a limited field of view; however, many turbines would appear stacked or overlapping when travelling along the path. It is considered that due to the distance from the revised development and the context of the path, there would be some change in the view, which would be considered not prominent. When considering these factors, the revised development is judged to result in no greater than a low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during daylight hours.
- 6.311 During the hours of darkness, all six nacelle lights would be theoretically visible from most of the core path. The relative elevation of the viewpoint in comparison with the turbine lights would result in a higher level of lighting intensity; however, the turbine lights would appear as faint red dots against the backdrop of the sky or distant hills. As The Ord is located beyond 5km of the nearest proposed lit turbine (circa 19km distance) the maximum nacelle lighting intensity that could be experienced would be 200cd. The change in lighting would occur in a part of the landscape with existing light sources in the foreground including the settlement of Lairg and scattered properties either side of Loch Shin. When considering these factors, the revised development is judged to result in a very low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during darkness hours.

Core Path SU16.10 Loch Craggie

- 6.312 The 6km long core path provides a linear route from a minor road north-east of Lairg, following an access track up to Loch Dola, then through Dalchork Wood up to the south-eastern edge of Loch Craggie. The path is located approximately 18.75km to the south-east of the Site at its closest point, with parts of the path lying beyond 20km.
- 6.313 The first 1km of the path to the west has no theoretical visibility, with nearly 3km located within Dalchork Wood with very limited outward visibility. Short sections of the path would have potential theoretical visibility, limited in part by intervening areas of woodland associated with Dalchork Wood. Most views towards the revised development are likely to be limited to glimpses of blade tips only. Due to the distance of the core path from the revised development and owing to the limited glimpsed nature of views from the path, no greater than a low/ very low magnitude of change is predicted during daylight hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during daylight hours.
- 6.314 During the hours of darkness, views towards the nacelle lighting would likely be intermittent in nature. Whilst the relative elevation of the path in comparison to the turbine lights would result in a higher level of lighting intensity, the turbine lights would appear as faint red dots against the backdrop of the sky or distant hills. As the path is located beyond 5km of the nearest proposed lit turbine (circa 19km distance) the maximum nacelle lighting intensity that could be experienced would be 200cd. The change in lighting would occur in a part of the landscape with very few existing light sources. When considering these factors, the revised development is judged to result in a very low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during daylight hours.

Core Path SU16.05 Loch Shin Hide

- 6.315 This very short circa 500-600m long core path provides access from the A836 to a bird hide close to the edge of Loch Hide which is located approximately 15.75km to the south-east of the Site at its closest point.
- 6.316 The path follows an access track down towards the bird hide, passing through woodland either side of the track, which would likely serve to limit outward views, including towards the revised development. From the bird hide, with views likely to be over Loch Shin, the revised development would appear on the skyline. The proposed turbines would appear relatively clustered together, with some likely to overlap with one another. At a distance of nearly 16km from the revised development, it is predicted that views towards the revised development would not appear prominent. When considering these factors, the revised development is judged to result in a low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during daylight hours.
- 6.317 During the hours of darkness, all six nacelle lights would be theoretically visible from the bird hide and limited sections of the access track. Whilst there would be a higher level of lighting intensity, the turbine lights would appear as faint red dots against the backdrop of the sky or distant hills. As the path is located beyond 5km of the nearest proposed lit turbine (circa 16km distance) the maximum nacelle lighting intensity that could be experienced would be 200cd. The change in lighting would occur in a part of the landscape with very few existing light sources. Due to the distance of the proposed lighting from the hide, the revised development is judged to result in a very low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during darkness hours.

John O'Groats Cycle Route

- 6.318 The John O'Groats Cycle Route follows the A836 near to the Site, as well as passing through Lairg to the south-east. The cycle route passes approximately 6km east of the revised development at its closest point and is shown on **Figures 6.18-6.20**.
- 6.319 Along a number of locations, the revised development would either be obscured by intervening vegetation or have limited or no theoretical visibility. These locations include beyond 8km to the north-east along the A836 with limited or no theoretical visibility of the revised development, south of Creag Riabhach Wind Farm where tree cover along both sides of the A836 would restrict views towards the revised development for an approximate 1.5km stretch and approximately 7.5km south-east of the Site for an approximate 4km stretch where the route passes through established coniferous forestry plantation. In addition, there would be no theoretical visibility of the revised development from the route to the south of Lairg, where the route follows the B864, located approximately 19km to the south-east.
- 6.320 With the route of the A836 used for the John O'Groats Cycle Route through the study area, the results of the assessment for the A836 are considered to be consistent with those that would be identified for the John O'Groats Cycle Route. No further assessment is therefore provided for John O'Groats Cycle Route.

Table 6.10: Assessment of Effects on Recreational Receptors during Operation

Recreational Receptor	Daylight Hours			Hours of Darkness		
	Magnitude of Change	Effect	Significant	Magnitude of Change	Effect	Significant
Core Path SU16.03 Ord Hill	Low	Moderate/ minor	No	Very low	Minor	No
Core Path SU16.10 Loch Craggie	Low/ very low	Minor	No	Very low	Minor	No
Core Path SU16.05 Loch Shin Hide	Low	Moderate/ minor	No	Very low	Minor	No
John O'Groats Cycle Route	Refer to visual effects upon Inverness to John O'Groats Cycle Route					

Bold text indicates a significant effect.

Effects on Roads and Rail

- 6.321 A summary of the sensitivity of the view, magnitude of change in the view, the level of effect and its significance is given in **Table 6.11: Assessment of Effects on Roads during Operation**.
- 6.322 In accordance with the methodology set out in **Technical Appendix 6.1: Landscape and Visual Impact Assessment Criteria**, the sensitivity of road receptors can vary between low and high depending on the reason for which they are using the route. For the purposes of the assessment, a sensitivity of medium has been assumed for each road receptor during daylight hours. The exception to this is where the road forms part of a cycle route, where a high sensitivity is assumed.
- 6.323 During darkness hours, in accordance with the methodology set out in **Technical Appendix 6.8**, the susceptibility of road receptors is considered to be medium for users of public rights of way and minor roads, and low for users of trunk/ major roads, and passengers on commercial railway lines (except where these form part of a recognised and promoted scenic route). Whilst the sensitivity of the A-class roads in the study area are considered to fluctuate slightly depending on locale, broadly speaking, they have been assigned a medium/ low sensitivity rating.

A838

- 6.324 The A838 extends in a broadly northern direction from the junction with the A836, south-east of the Site, where it passes along the north-western edge of Loch Shin to the southern edge of the Site. Beyond the Site, the road continues north-west passing Loch a' Ghriama, Loch Merklund and Loch More. The A838 extends north to Durness before following the north coast, terminating at Tongue.

- 6.325 Beyond 4km to the west of the Site, the A838 is not covered by any theoretical visibility and therefore, this part of the road is not considered further within the assessment.

Road users travelling to the north-west

- 6.326 Road users joining the A838 from the junction with the A836, travelling to the north-west, would have theoretical visibility of the revised development between Colaboll and West Shinness Lodge, as shown by **A838 Sequential Viewpoints 1 and 2**. However, actual visibility would be screened by intervening areas of coniferous forestry and localised landform such that any view of the revised development would be restricted to partial, distant and brief glimpses of the proposed turbines that would appear fleeting and incidental in nature.
- 6.327 As the A838 continues to the north-west of West Shinness Lodge, intervening landform would likely partly obscure turbine towers with intermittent views of the proposed turbines appearing relatively clustered together and visible on the skyline or distant hills in the direction of travel, as shown by **A838 Sequential Viewpoint 3 (LVIA Viewpoint 9)**. When considering these factors, the revised development is judged to result in a medium/ low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during daylight hours.
- 6.328 During the hours of darkness, nacelle lights would be glimpsed but filtered by the pattern of vegetation along the road. The turbine lighting intensity would vary along the road; however, at distances of 8km or more, the lights would appear as faint red dots against the backdrop of the sky or distant hills. The change in lighting would occur in a part of the landscape with very few existing light sources except for lights from scattered properties along the edge of Loch Shin and vehicle movement along the A838. When considering these factors, the revised development is judged to result in a worst-case low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during darkness hours.
- 6.329 Continuing to the north-west, within approximately 5km-8km of the revised development, road users travelling in a north-westerly direction towards the revised development become intermittently set within pockets of forestry, woodland, or more moorland or scrubby vegetation along both sides of the road, as shown by **A838 Sequential Viewpoint 4**. As a result, the revised development is judged to result in a medium/ low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not significant effect during daylight hours.
- 6.330 The intermittent vegetation cover continues to limit some direct views towards the revised development; however, the proposed turbines would still be clearly noticeable from select locations up to 6km. When considering these factors, the revised development is judged to result in no greater than a medium magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate**, significant effect during daylight hours.
- 6.331 During the hours of darkness, most of the nacelle lights would be visible from the road, filtered by the pattern of intervening vegetation. The turbine lights would likely have a lower level of lighting intensity and appear as faint red dots against the backdrop of the sky or distant hills. The change in lighting would occur in a part of the landscape with very few existing light sources, seen in the context of vehicle movement along the A838. When considering these factors, the revised development is judged to result in a medium/ low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during darkness hours.

- 6.332 Despite some limited sections of the road where the revised development would not be visible, the proposed turbines are predicted to appear prominent along open parts of the road within 5km, particularly when travelling in a north-westerly direction. Whilst landform and coniferous forestry would partly obscure the towers of some turbines, all turbines, including hubs, would be clearly visible on the skyline, as shown by **A838 Sequential Viewpoints 5, 6 and 7**. When considering these factors, the revised development is judged to result in a high or high/ medium magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate**, significant effect during daylight hours.
- 6.333 During the hours of darkness, all nacelle lights would be theoretically visible from most of the road within 5km to the south-east of the Site. Despite the proximity of those travelling along the A838, with the relative lower elevation of the A838 in comparison with the turbine lights, the turbine lights would likely result in a low level of lighting intensity, appearing as faint red dots against the backdrop of the sky. The change in lighting would occur in a part of the landscape with very few existing light sources, seen in context of lighting from nearby properties and vehicle movement on the A838 for an approximate 5.3km section of the route. When considering these factors, the revised development is judged to result in a medium magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **moderate**, significant effect during darkness hours.

Road users travelling to the south-east

- 6.334 Theoretical visibility of the revised development is limited to within 4km to the west of the Site covering southbound road users of the A838 between the access track to Cassley Substation at Corrykinloch and the Site.
- 6.335 This section of the route crosses between Loch a' Ghriama and Loch Shin, in a broadly southerly direction, before turning south-east to follow the northern edge of Loch Shin. Views towards the Site for south-east travelling receptors are largely obscured by rising landform and coniferous forestry plantation. Existing overhead lines with pylons are also an intervening feature from sections of the road in this location.
- 6.336 Most of the revised development would be either obscured by the foreground forestry and by the scattered pattern of built form and vegetation close to the A838. Between Corrykinloch and Overscaig, theoretical visibility of the revised development is restricted to the blade tips of six turbines, as shown by **A838 Sequential Viewpoint 10**; however, actual visibility of the proposed turbines would be screened by intervening forestry. As the road continues to the south-east towards Overscaig, the screening influence of intervening landform reduces, and theoretical visibility of five hubs and nine blade tips of the proposed turbines is shown by **A838 Sequential Viewpoint 9**. Despite this, the pattern of screening by intervening coniferous forestry and deciduous roadside trees continues in this location such that actual visibility of the revised development would be limited to far few numbers of the blade tips. This partial visibility of the revised development would be experienced in the same field of view as existing overhead lines and pylons.
- 6.337 As the A838 passes East Overscaig and approaches the Site, the theoretical visibility of the revised development, as shown by **A838 Sequential Viewpoint 8**, would be screened by intervening deciduous roadside trees and coniferous forestry, such that most views of the proposed turbines would be limited to glimpses of blade tips, with only select turbine hubs intermittently visible above intervening vegetation. When considering these factors, the revised development is judged to result in a medium/ low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during daylight hours.

- 6.338 During the hours of darkness, the nacelle lights would be intermittently obscured by forestry and other intervening vegetation for south-east travelling receptors on the A838. Despite the proximity of receptors travelling along the A838 towards the revised development, with the relative lower elevation of the road in comparison with the turbine lights, the turbine lights would likely result in a low level of lighting intensity, so any glimpses of the lights would appear as faint red dots against the backdrop of the sky. The change in lighting would occur in a part of the landscape with very few existing light sources aside from lighting at nearby properties and vehicular movements on the road. When considering these factors, the revised development is judged to result in a low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during darkness hours.
- 6.339 In summary, of the approximate 135km total route of the A838, approximately 6.1km of the road would be significantly affected by the revised development, during daylight hours, which equates to an approximate travel time of 6 minutes assuming an average speed of 40mph. During the hours of darkness, approximately 5.3km of the road would be significantly affected by the revised development, which equates to an approximate travel time of 5 minutes assuming an average speed of 40mph.
- 6.340 The significant effects would be experienced by road users travelling in a north-westerly direction between Alltnacaorach and west of Fiag Bridge, in close proximity to the Site. Road users travelling in a broadly south-easterly direction on the A838 would not experience a significant visual effect as a result of the revised development.
- 6.341 The assessment found that receptors would experience significant effects during daylight hours from sections of the A838 up to approximately 8km to the south-east of the revised development, and to distances up to approximately 5km to the south-east of the revised development during the hours of darkness.

A836

- 6.342 The A836 passes approximately 6km east of the proposed development at its closest point and also forms the route of the John O'Groats Cycle Route through the 20km study area, between Lairg in the south and east of Loch Staing in the north.
- 6.343 There is no theoretical visibility of the revised development shown for the A836 on land to the north of The Crask, approximately 7km east of the Site, or for the sections of the route north and south of Lairg, approximately 19km to the south-east. Therefore, these parts of the road are not considered further within the assessment.

Road users travelling to the north and south

- 6.344 For an approximate 15.9km stretch to the east and south-east of the Site between Lairg (approximately 19km from the revised development), and to east of Allt an Drochaidean Beaga (approximately 6.9km from the revised development), the proposed turbines would be intermittently theoretically visible from the road and cycle route, as shown by **A836 Sequential Viewpoints A-G**. Oblique and very oblique views towards the revised development from the route would be possible, limited in part by areas of vegetation along the road, as well as by intermittent localised landform and blocks of coniferous forestry, with views being fleeting and incidental in nature. Therefore, it is predicted that any views towards the revised development would not be prominent. When considering these factors, the revised development is judged to result in no greater than a medium/ low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during daylight hours.

- 6.345 During the hours of darkness, the nacelle lights would be theoretically visible from the cycle route; however, due to vegetation and coniferous forestry plantation in the foreground, views towards the lights would be intermittent and filtered. The turbine lighting intensity would vary along the cycle route; however, at distances of 11km or over, the lights would appear as faint red dots against the backdrop of the sky or distant hills. The change in lighting would occur in a part of the landscape with very few existing light sources, seen in context of vehicular movements along the A836. When considering these factors, the revised development is judged to result in a worst-case low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **moderate/ minor**, not-significant effect during darkness hours.
- 6.346 For an approximate 1.5km stretch of the A836, starting approximately 2.1km south of The Crask Inn, to the east of the revised development, the road and cycle route cross relatively open moorland, before following an additional 3.5km stretch of recently felled coniferous plantation. Oblique views from the route would be possible towards the revised development, at a distance of approximately 6km at its closest point, as shown by **A836 Sequential Viewpoints H and I**. Whilst some of the proposed turbines would likely be partly obscured by intervening landform, all turbines would be visible to some extent largely backclothed by the distant hills. The revised development would appear well spaced whilst travelling along the A836 in both directions, albeit extending over a wide field of view. When considering these factors, the revised development is judged to result in a worst-case high/ medium magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **major/ moderate**, significant effect during daylight hours.
- 6.347 For road and recreational users travelling south on the A836, through the area of theoretical visibility illustrated for the routes north of The Crask Inn, theoretical visibility towards the revised development is shown by **A836 Sequential Viewpoint J** as receptors round the landform of The Crask. However, actual visibility of the revised development would be predominantly screened by intervening coniferous forestry flanking the route and limited to partial and short-lived glimpses of the northern-most proposed turbines that would appear fleeting and incidental in nature. When considering these factors, the revised development is judged to result in a low/ very low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during daylight hours.
- 6.348 During the hours of darkness, most of the nacelle lights would be intermittently theoretically visible from the route. With the relative lower elevation of this section of the A836 in comparison to the turbine lights, the turbine lights would likely result in a lower level of lighting intensity, appearing as faint red dots against the backdrop of the sky or distant hills. The change in lighting would occur in a part of the landscape with very few existing light sources, seen in context of headlights associated with vehicle movement on the A836. When considering these factors, the revised development is judged to result in a worst-case medium magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **moderate**, not-significant effect during darkness hours.
- 6.349 It is recognised that the areas of recently felled coniferous plantation have been replanted and therefore, in the longer term, the road and cycle route would pass through an area of forestry with limited outward views. Whilst the assessment considers the worst-case scenario, assuming that there is no forestry in place, it is acknowledged that there would be periods of time over the operational phase of the revised development when the effects would be less than predicted.

- 6.350 In summary, of the approximate 196km total route of the A836, approximately 1.5km of the road would be significantly affected by the revised development, during daylight hours, which equates to an approximate travel time of 1.5 minutes assuming an average speed of 40mph. This significant effect would be experienced by road users travelling in both directions in proximity to The Crask Inn.
- 6.351 The assessment found that receptors would experience significant effects during daylight hours on the section of the A836 that passes near The Crask Inn to the east, to distances up to approximately 6.5km to the east of the revised development.
- 6.352 No significant effects upon road and recreational users of the A836 have been identified during the hours of darkness.

A839

- 6.353 The A839 passes through Lairg where it is located approximately 19km to the south-east of the Site at its closest point. The road provides a route from Rosehall to the A9 near Golspie where it follows Strath Fleet.
- 6.354 Limited glimpses towards blade tips of the revised development would be possible from elevated locations of the A-class road to the north-east of Lairg, limited by intervening foreground vegetation close to the road. Within Lairg, most views towards the revised development would be filtered by intervening landform, Ferry Wood and Lairg Power Station. When considering these factors, the revised development is judged to result in no more than a low/ very low magnitude of change during daylight hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during daylight hours.
- 6.355 Any glimpses towards the nacelle turbine lighting would be seen in context of the street and property lights in the foreground at distances of over 19km. When considering these factors, the revised development is judged to result in a very low magnitude of change during darkness hours. Combined with the sensitivity of the receptor, this would result in a **minor**, not-significant effect during darkness hours.

Moray Firth Tourist Route

- 6.356 The Moray Firth Tourist Route provides an 80-mile scenic driving route between Inverness and the A839 junction with the A9 near Golspie, offering an alternative to the A9. The route is located approximately 19km to the south-east of the Site at its closest point.
- 6.357 The route would follow the A893 to the north-west of Lairg and the A836 to the south of Lairg, with the levels of effect predicted to replicate those as set out above from these roads. As a result, a **minor** not significant effect would occur during daylight hours, and during darkness hours.

Table 6.11: Assessment of Effects on Roads during Operation

Recreational Receptor	Daylight Hours			Hours of Darkness		
	Magnitude of Change	Effect	Significant	Magnitude of Change	Effect	Significant
A838 – south-east between Colaboll and West Shinness Lodge (Road users travelling to the north-west)	Medium/low	Moderate/minor	No	Low	Moderate/minor	No
A838 – south-east between 5km and 8km (Road users travelling to the north-west)	Medium	Moderate	Yes	Medium/low	Moderate/minor	No
A838 – south-east up to 5km (Road users travelling to the north-west)	High to high/medium	Moderate	Yes	Medium	Moderate	Yes
A838 – west up to 4km	Medium/low	Moderate/minor	No	Low	Moderate/minor	No
A836 – east and south-east between 19km and 7km	Medium/low	Moderate/minor	No	Low	Moderate/minor	No
A836 – near Crask Inn to the east	High/medium	Major/moderate	Yes	Medium	Moderate	No
A839	Low/very low	Minor	No	Very Low	Minor	No

Moray Firth Tourist Route	Low/ very low	Minor	No	Very Low	Minor	No
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Bold text indicates a significant effect.

Mitigation

6.358 As discussed in best practice guidance for EIA, mitigation measures may include:

- Avoidance of effects.
- Reduction in magnitude of effects; and
- Compensation for effects (which may include enhancements to offset any adverse effects).

Embedded Mitigation

- 6.359 The primary mitigation adopted in relation to the revised development is embedded within the design of the revised development and relates to the consideration that was given to avoiding and minimising landscape and visual effects during the evolution of the proposed development layout, which has been further refined following consultation with THC, resulting in the revised layout presented as FEI. This process is often referred to as 'mitigation by design.' A detailed discussion of the design evolution and the iterative process underpinning it is provided in **Chapter 4: Design Evolution**. Design evolution is summarised below, in so far, as landscape and visual matters have influenced the revised development.
- 6.360 The EIA scoping layout was based on 22no. proposed turbines with blade tip heights up to 230m. The layout then progressed through a series of smaller iterations based upon ground conditions and landscape and visual considerations. Visual considerations were a key consideration with turbines removed to reduce the lateral extents of the wind farm from key viewpoints; however, noting the minor increase in height up to 250m. The extent of the Zone of Theoretical Visibility was taken into consideration for this design decision. From analysis, the increase in turbine tip height to 250m translated to a 0.5% increase in visibility across study area and from wireline analysis it was felt that this could be accommodated within the receiving landscape due to the coherent design created through careful turbine placement.
- 6.361 In the presentation of the proposed development, as assessed in the EIAR, consideration was also given to the proposed development in this location, its relationship with other operational and consented wind farms in the locality, and the capacity of the receiving landscape to accommodate further wind farm development. The proposed development, and superseding revised development, follow many of the turbine composition and spacing patterns implemented at recently consented or applied for developments in the surrounding area, such as Sallachy 2nd Submission (including turbine extension) and Shinness, where, for instance, a similarly promoted linear design with turbines of a comparable scale have been proposed. These changes reflect technological advancements, and the potential higher energy yields that can arise from higher – and more efficient – modern turbines, than was previously the case when many of the currently operational wind farms were under consideration, i.e., Creag Riabhach.
- 6.362 Based on general good practice design principles (as set out in NatureScot guidelines) and an analysis of Site-specific opportunities and constraints, the wind farm layout evolved to take into consideration a number of landscape and visual constraints whilst maintaining an optimal development and seeking to maximise renewable generation and carbon reduction, resulting in the 15no. proposed turbine layout with blade tip heights up to 250m which was taken forward to the EIA phase.
- 6.363 A design rationale was adopted to avoid inconsistent turbine spacing, large gaps, turbine outliers, or excessive overlapping of turbines, to minimise visual confusion, minimise the

prospect for visual effects, and ensure a balanced/ compact array from key views in the local landscape, with the layout amended during the design iteration process to minimise any potential effects from Assynt-Coigach NSA or from nearby settlements and residential properties.

- 6.364 The above principles have been applied as a number of iterations to the design were made, culminating in the revised development which comprises a 15no. proposed turbine layout with reduced blade tip heights from 250m to a mixture of 200m-230m. At the request of THC, T3 and T5 were also located downslope from the hilltop of Meall Odhar. Taking all other engineering and environmental constraints into account, the final layout of the turbines was specifically designed in response to feedback received from THC, and to achieve a balanced array of turbines when viewed from the surrounding landscape, whilst maximising the overall energy yield.
- 6.365 In considering the layout of other structures and ancillary features of the revised development, the position of the substation, construction compound, battery storage compound, and borrow pits are located so as to minimise their influence on the surrounding area. These remain largely unchanged from the information presented as part of the proposed development.
- 6.366 The turbines themselves would be painted an off-white colour with a low reflectivity semi-matt white or light grey (or similar as agreed with consultees). Such a finish is widely regarded to be the least intrusive in the landscape when seen against the sky in a host of weather conditions typically experienced within the UK.
- 6.367 Whilst recognising that areas of commercial coniferous forestry plantation are to be removed during the construction phase, with areas replanted that may take up to seven years of growing to reach 2m, there are other areas of forestry that would be retained on-site, including in proximity to the A838. The forestry replanting design (see **Figure 14.3**) has been development in-part to maximise the screening/ filtering benefits of the forestry across the lifetime of the revised development, providing a regular occurrence in views, whilst minimising potential visibility of ground-level components of the revised development, such as the substation building and access tracks, particularly from local receptors. The retained areas of forestry would also minimise the potential for clear, unobstructed views of the proposed turbines from the properties at Overscaig, as well as from sections of the A838 as the road routes past the extents of the Site.
- 6.368 Mitigation of visible aviation lighting has been designed into the revised development by adopting a cardinal lighting design where only six of the outermost turbines are lit (T1, T4, T6, T9, T12, and T15), with the design agreed with the CAA. Mitigation of visible turbine lighting has been embedded into the lighting design. Visibility sensors would be installed on relevant turbines to measure the prevailing atmospheric conditions and visibility range. Should atmospheric conditions mean that visibility from the turbines within the Site is greater than 5km from the revised development, CAA policy permits lights to operate in a lower intensity mode, being a minimum of 10% of their capable illumination. Therefore, the 2000cd steady state lights would operate at 200cd. If visibility is however restricted to 5km or less, the lights would operate at 2000cd.
- 6.369 Additionally, the inherent directional intensity of 2000cd lights can be used to reduce vertical downwards lighting impacts at elevations less than -1° degree vertical angle from the horizontal plane from the aviation light. By ensuring the lights installed comply with the ICAO recommendations, it is possible to attenuate the vertical downwards light to a level that reduces the visual impact from receptors at ground levels below the lights. Implementing the ICAO recommendations, at -1 degrees the aviation lights should only be 1125cd and at -10 degrees should only be 75cd, when visibility is greater than 5km.

- 6.370 Further explanation of this is set out in **Technical Appendix 6.8: Assessment of Night-time Lighting - Assessment Criteria and Methodology (Volume 4 of this EIA Report)**.
- 6.371 These measures are proposed as embedded mitigation. They are likely to reduce the magnitude of visual effects particularly for distant receptors; however, this feature would not remove visibility of aviation lighting completely for any nearby receptors.
- 6.372 In the long term, when the revised development is decommissioned, the turbines would be removed from the Site, and the hardstanding would be restored in accordance with a restoration plan to be approved by the relevant consultees.

Assessment of Residual Effects

- 6.373 In general terms, best practice for EIA, requires that the significance of potential effects be assessed, with mitigation proposals identified, and the residual effect (with mitigation in place) then re-assessed to demonstrate the effectiveness of the mitigation proposed.
- 6.374 In the case of LVIA for wind farms this presents two interrelated problems:
- Potential effects cannot be meaningfully assessed in the absence of an assumed layout; and
 - Landscape and visual mitigation is principally focussed on the refinement of the Site layout ('mitigation by design').
- 6.375 The residual landscape and visual effects have been assessed as a result of the primary mitigation embedded within the design of the revised development, relating to avoiding and minimising landscape and visual effects during the evolution of the revised development layout. Therefore, the residual landscape and visual effects are considered the same as those assessed in the main part of the LVIA.

Assessment of Cumulative Effects

- 6.376 For the cumulative assessment, consideration was initially given to a 60km radius from the Site, as recommended by NatureScot best practice guidance. After undertaken initial desktop analysis of preliminary ZTVs and wirelines from key design viewpoints, a 35km cumulative study area was considered sufficient to appraise potential cumulative effects attributable to a proposed wind farm on the Site, and this was put forward for consideration in the EIA scoping report.
- 6.377 Following the EIA scoping exercise, the initial LVIA study area and cumulative study area was increased to 45km in response to the feedback from consultees with respect to the proposed development. For the revised development, an initial cumulative study area for the LVIA of a 45km radius from the turbines in all directions, has been retained for comparative purposes, and as this extent of study area was agreed with THC for the proposed development. The extent of this study area, and the other wind farms located within 45km of the Site, is illustrated in **Figure 6.29**.
- 6.378 All other wind energy developments that are operational, under construction, consented, subject to a valid full planning application, or a valid scoping request within 45km of the revised development have been identified and reviewed as part of the cumulative baseline (see **Figure 6.29**). It is acknowledged that this list is constantly evolving and therefore a date of 26 June 2026 was used as an effective 'cut-off' date after which no further research was undertaken on the evolving status of wind energy development in

the study area, and the cumulative Landscape and visual Assessment (CLVIA) reflects the status of each wind farm at the time of this date.

- 6.379 When reviewing the list, analysis was undertaken to refine this list in order to ensure a proportionate approach focused on potentially significant effects, as advocated by NatureScot guidelines 'Assessing the Cumulative Impact of Onshore Wind Energy Developments' (2012) which states (page 8, paragraph 33) that:

"Assessments should focus on the most significant cumulative effects and conclude with a clear assessment of those which are likely to influence decision making."

- 6.380 In this regard and following initial site work informed by analysis of preliminary ZTVs and wirelines from the agreed viewpoint locations, it was determined that any significant cumulative landscape and visual effects are likely to occur within a much narrower radius from the Site; therefore, the level of assessment work incrementally decreases with distance from the Site, with the greatest focus of assessment being within broadly 20km of the Site.

- 6.381 The intention is that the detail of the cumulative study remains proportional to the likely significance of effects and therefore focused on those developments which have the greatest potential to give rise to significant cumulative effects with the revised development. It was also deemed appropriate to scope out any turbines under 50m to tip, or any turbines between 50m and 80m to tip which lie over 10km from the nearest proposed turbine. Developments that are at the scoping or pre-application stage are considered separately due to the uncertainty that these developments will come forward and the lack of adequate information about project details. This is in accordance with the approach advocated in GLVIA3.

- 6.382 At the time of preparing this LVIA, there were 14no. other wind farms within the detailed 20km cumulative study area which were either operational, under construction, in-planning or at scoping/ pre-application stage, which are set out in the table below.

Table 6.12 Other Wind Farms within 20km of the Revised development

Site	Blade Tip Height (m)	Number of Turbines	Approximate Distance and Direction
Operational / Under Construction			
Creag Riabhach	125	22	7km north-east
Achany	100	19	16km south-east
Rosehall	90	19	17km south-east

Consented			
Sallachy – 2 nd Submission	149.9	9	3km south-west
Creag Riabhach Extension	149.9	3	8km north-east
Achany Extension*	149.9	18	10.5km south
Strath Tirry	135	4	13km south-east
Chleansaid	200	16	14km south-east
In-Planning			
Shinness	200	16	5km south-east
Sallachy Extension	149.9	1	6km west
Allt An Tuir	200	9	17km south
Scoping/ Pre-Application			
Invercassley	230	22	15km south south-west
Fionn	230-250	29	19km south south-west
Creag Dhubh	200	27	19km south-east

* As part of the LVIA Chapter for the proposed development, the consented Achany Extension development was assessed as comprising turbines with a blade tip height up to 150m. Its consented status has been retained for the purposes of this assessment; although, it is recognised that a planning application to vary the planning consent from 149.9m to 200m tall turbines has recently been submitted, with the position of all proposed turbines remaining the same as that for the consented development.

- 6.383 With respect to other wind farm sites in the wider 45km study area, it is recognised that the status of some of these schemes has changed since the LVIA Chapter for the proposed development, including application submissions for Inveroykel, Creachan, and Coille Beith. EIA Scoping/ Pre-Application requests have also been submitted for several projects, including Kinlochbervie Renewable Energy Park, Ruith Cnoc, and Beinn Tharsuinn Repowered and Extended. In relation to the consented Strath Oykel development, the development has been considered and assessed as being consented; although, it is recognised that the granting of planning consent was subject to a judicial review, with the decision being quashed. Scottish Ministers are however yet to determine the next steps, and further determination of the development.
- 6.384 For the avoidance of doubt, and to reiterate the methodology adopted in **Appendix 6.1: Landscape and Visual Impact Assessment Criteria**, the baseline against which the solus effects of the revised development has been assessed includes all operational wind farms. An assessment of the revised development with consideration of other operational wind farms has already therefore been presented in the main section of this LVIA.
- 6.385 The primary purpose of the cumulative impact assessment is therefore to consider the additional effects that might arise as a result of the revised development if the other consented, under construction, in-planning (awaiting determination) and scoping/ pre-application developments were also operational. In addition, this cumulative assessment also includes a further consideration of the overall totality of the effect, when the revised development is considered alongside the other operational, consented, or in-planning developments across the 20km detailed study area.
- 6.386 The baseline in the cumulative impact assessment is therefore extended to consider other developments that are not yet present in the landscape but are at various stages in the planning process. Three scenarios are generally considered which reflect the different degrees of certainty that these developments will be constructed:
- Scenario 1 assumes that other consented (but as yet unbuilt) wind farms are operational.
 - Scenario 2 extends this further to assume that all developments in-planning are also operational. In reality, it is possible that other developments that are in-planning may not be approved and constructed but this scenario assumes that all in-planning developments are operational; and
 - Scenario 3 extends this even further and assumes that all scoping/ pre-application developments are also operational, in addition to all consented and in-planning developments. Scoping/ pre-application developments may not even be constructed or even form part of a future planning application; however, this scenario considers the 'worst case' situation.

Cumulative ZTVs and Wireframes

- 6.387 Cumulative ZTVs (CZTVs) have been produced to illustrate the theoretical visibility of various other wind farms and combinations of wind farms with the revised development.
- 6.388 It should be reiterated that ZTVs imply a much greater geographical extent of influence on the landscape and views of it than would actually be the case. It therefore follows that the cumulative ZTVs also exaggerate the actual impacts of the turbines on landscape character and visual amenity as they do not take account of vegetation or buildings in the landscape, which may restrict the nature and extent of views.

6.389 Cumulative ZTVs have been produced for the following combinations of existing, consented, and other wind farm sites in planning:

- Operational: Beinn nan Oighrean, Beinn Tharsuinn*, Bettyhill Phase 1, Coire na Cloiche, Gordonbush, Gordonbush Extension, Kilbraur, Kilbraur Extension, Lairg, and Strathly South Wind Farms (see **Figure 6.31: Cumulative ZTV within 45km with Operational and Constructed Wind Farms**).
- Operational: Creag Riabhach, Rosehall, and Achany Wind Farms (see **Figure 6.34: Cumulative ZTV within 20km with Operational and Constructed Wind Farms**).
- Consented: Bettyhill Phase 2, Garvary, Lairg 2 Resubmission, Meall Buidhe, and Strath Oykel Wind Farms (see **Figure 6.32: Cumulative ZTV within 45km with Consented Wind Farms**).
- Consented: Achany Extension, Chleansaid, Creag Riabhach Extension, Sallachy 2nd Submission, and Strath Tirry Wind Farms (see **Figure 6.35: Cumulative ZTV within 20km with Consented Wind Farms**).
- In-Planning: Acheilidh, Balblair, Coille Beith, Creachan, and Inveroykel Wind Farms (see **Figure 6.33: Cumulative ZTV within 45km with In Planning Wind Farms**).
- In-Planning: Shinness and Allt an Tuir Wind Farms, as well as Sallachy Extension Turbine (see **Figure 6.36: Cumulative ZTV within 20km with In Planning Wind Farms**).

* Beinn Tharsuinn is currently operational but is soon to be decommissioned. Its operational status has been retained for the purposes of this assessment; although, it is recognised that an EIA Scoping/ Pre-Application request has recently been submitted to repower and extend the development

6.390 Whilst no cumulative ZTVs have been produced to show the combinations of theoretical visibility for scoping/ pre-application wind farms due to the increased uncertainty regarding a site design, the turbine layout information made publicly available has been used, so a version of all scoping/ pre-application developments within the 45km study area can be incorporated into the cumulative wirelines for each viewpoint to provide an indication of location, scale, and intervisibility with the revised development and other wind farms in the study area.

Cumulative Effects on Landscape Character

6.391 It is acknowledged that wherever more than one wind farm is visible at any given location in the landscape, there will be a greater overall or cumulative effect on landscape character than if just one wind farm was visible in the landscape.

6.392 It is also noted however that in any given landscape where turbines are already present, the additional effect on landscape character of introducing further turbines may not be as significant as the initial introduction of turbines. Furthermore, in general, the greater the number of turbines in the baseline landscape the less significant the addition of further turbines may be in landscape character terms as the landscape will be more heavily characterised by turbines in the baseline situation.

6.393 It has been assessed in the assessment of the solus effects of the revised development set out earlier in this chapter that there would be some limited significant effects on landscape character as a result of the revised development. The purpose of this section of the cumulative assessment is therefore to identify whether there would be any change to the assessments of significance previously set out in relation to the revised development, once

the other wind turbines which are not already operational, are considered to form part of the baseline landscape.

- 6.394 Generally speaking, such additional cumulative effects would arise when the addition of the revised development to the baseline results in an increase in effects, when viewed in combination with the other wind turbines forming part of the baseline landscape.

Cumulative Scenario One – Other Consented Developments are also considered to be Operational

- 6.395 In this cumulative scenario (where other consented developments are also considered to be operational) there would be five additional developments: Creag Riabhach Extension, Chleansaid, Strath Tirry, Achany Extension, and Sallachy 2nd Submission. Each of the developments are located to the north-east, south-east, south, and south-west of the Site at varying distances between 3km and 14km.
- 6.396 Sallachy 2nd Submission is the closest of the other consented developments, located around 3km to the south-west of the Site, in the neighbouring landscape character typology (LCT 135: Rounded Hills - Caithness & Sutherland). The Chleansaid and Strath Tirry developments lie over 10km to the south-east of the Site, between the Creag Riabhach Extension and Achany Extension developments that lie approximately 8km north-east and approximately 10.5km south of the revised development, respectively.
- 6.397 The CZTV prepared for the consented developments within 20km of the revised development (see **Figure 6.35**) illustrates the potential for visibility of the revised development with one or other of the developments from much of the landscape in all directions within 10km of the revised development before fragmenting to more elevated areas to the north, east, and west of the Site. The combined visibility pattern remains relatively consistent to the south and south-east of the study area. The cumulative wirelines included with the visualisations (see **Volumes 3 and 5**) illustrate the relationship between the sites and show that in reality much of the theoretical visibility shown on the CZTV would be no more than blade tips, with greater visibility seen in viewpoints from more elevated locations; albeit often at increased distances from the viewer (e.g. **Viewpoints 6, 7, 10, 12, 13, 15, and A-D**).
- 6.398 When reviewing the CZTV to ascertain the additional theoretical visibility the revised development would add across the extents of the 20km study area, there is minimal new areas of land to consider, with the areas illustrating where the revised development would theoretically be the only wind farm visible, largely concentrated at the edges of areas displaying combined visibility of the revised development and one or other consented development. Conversely, **Figure 6.35** illustrates that there would be several large areas across the 20km study area where there is no theoretical prospect to view the revised development, but where there would be visibility of one or other consented developments.
- 6.399 On this basis, it would appear that the introduction of the consented developments into the baseline landscape would extend the existing influence of wind farms present across the extents of the 20km study area.
- 6.400 Whilst the addition of the revised development would extend the influence of wind turbines in LCT 134: Sweeping Moorland and Flows (Strath Fiag/Tirry unit) to the north, north-east, east, south-east, and upon LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit) to the south-east, south, south-west, and west; and across LCT 135: Rounded Hills Caithness & Sutherland (Loch Fiag Rounded Hills unit) in the north-west, north and north-east, the presence of the consented developments means the revised development would not result in any change to the solus effects identified in the main assessment, nor would it introduce a cumulative significant effect.
- 6.401 Indeed, the future baseline conditions brought about the consented developments would have the potential to reduce the solus effects attributable to the revised development.

Cumulative Scenario Two – Other In-Planning Developments are also considered to be Operational

- 6.402 In this cumulative scenario (where other developments in planning are also considered to be consented and operational) there would be three further additional developments to consider: Shinness, which would be located around 5km to the south-east, Sallachy Extension Turbine that would be located around 6km to the west, and Allt An Tuir, which would be located around 17km to the south of the revised development.
- 6.403 The CZTV prepared for the in-planning developments within 20km of the revised development (see **Figures 6.36**) illustrates the potential for visibility of the revised development with Shinness, Sallachy Extension, or Allt An Tuir from large parts of the landscape.
- 6.404 In the context of the existing wind energy development at Achany and Rosehall, the Allt An Tuir development is judged to have minimal potential to result in any cumulative effects on landscape character with the revised development, beyond those already set out in the main assessment.
- 6.405 The Sallachy Extension would add one further turbine to an existing consented wind farm. In this context, the revised development is judged to have minimal potential to result in any cumulative effects on landscape character, beyond those already set out in the main assessment.
- 6.406 In the case of the Shinness development, this has the potential to be seen simultaneously with the revised development in **Viewpoints 3, 6-16, and A-D**. Indeed, in several viewpoints, including **Viewpoints 8, 9, and 11**, the Shinness development would be seen in the very foreground of the view. In these instances, the presence of the Shinness development would serve to reduce the potential for landscape effects from the revised development, as it would exert a greater influence on the character of the landscape within its vicinity than the more distant revised development.
- 6.407 Similar to the revised development, the Shinness development would be located in LCT 134: Sweeping Moorland and Flows, increasing the presence of wind energy as a characteristic of this LCT. Whilst the presence of Shinness would serve to reduce the potential impact of the revised development on the character of the 'host' LCT unit, there would however be some additional localised significant cumulative effects that would likely arise to the landscape character of LCT 134: Sweeping Moorland and Flows, and the neighbouring LCT 135: Rounded Hills - Caithness & Sutherland owing to Shinness and the revised development appearing as discrete wind farms and adding turbines in a different – and additional – landscape from the existing baseline and consented developments.
- 6.408 When considering that the consented developments are predicted to lower the effects predicted when assessing the effects of the revised development against the current baseline conditions, the resulting change – and predicted rise in effects – brought about by the introduction of the revised development and Shinness is ultimately predicted to be no different to the judgements presented in the main assessment.

Totality of the Combined Effect of All Developments, including the other Operational Developments

- 6.409 Consideration has also been given to the overall totality of the effect, when the revised development is considered alongside the other operational, consented, and in-planning developments found within the study area. Of most relevance to this, is a consideration of the overall impact on the LCTs where a significant effect was identified in the main

assessment, namely LCT 134: Sweeping Moorland and Flows (Strath Fiag/Tirry unit) and LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit).

- 6.410 The closest operational developments to the revised development are the Creag Riabhach development that comprises 22no. turbines and lies approximately 7.5km to the north-east of the Site, and the Achany and Rosehall developments that comprise 19no. turbines each, and that both lie approximately 16km-17km south-east of the revised development. Other operational developments are located beyond 20km, to the north-east, south-east, and south of the revised development.
- 6.411 The CZTV prepared for the operational developments (see **Figures 6.31 and 6.34**) illustrates the potential for visibility of the revised development with one or other of the developments from much of the landscape, in particular from higher ground.
- 6.412 Overall, collectively the operational developments serve to result in wind energy being seen as a notable feature in the landscape of the wider study area to the north-east, south-east, and south of the Site. In particular, within LCT 134: Sweeping Moorland and Flows, and the neighbouring LCT 135: Rounded Hills - Caithness & Sutherland, where a significant effect on landscape character would arise across a notable area from the existing developments. The addition of the revised development would serve to reinforce this pattern of wind energy within LCT: 134 – Sweeping Moorland and Flows (Strath Fiag/Tirry unit) and LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit), albeit extending the significant effects into a separate area further to the north and west.
- 6.413 It is acknowledged that the combined overall effect on the character of LCT: 134 – Sweeping Moorland and Flows (Strath Fiag/Tirry unit) and LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit), would be notable, were the revised development and the other consented and in-planning developments constructed, reinforcing an existing documented characteristic feature. There would however remain considerable spacing between the revised development and the operational Achany and Rosehall developments, the consented Achany Extension, and the in-planning Allt An Tuir.
- 6.414 Whilst the physical separation between the revised development and the other developments, namely the existing Creag Riabhach and its consented extension, the consented Chleansaid, Strath Tirry, and Sallachy 2nd Submission (including proposed extension), and the in-planning Shinness, would be reduced if all developments were constructed, it would not be the case that wind energy would become the single dominant characteristic of LCT: 134 – Sweeping Moorland and Flows (Strath Fiag/Tirry unit) or LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit), so as to prevent an understanding and appreciation of the character of the LCT.

Cumulative Effects on Views and Visual Amenity

- 6.415 As with cumulative landscape character effects, it is acknowledged that the addition of the revised development to the baseline has the potential to result in an increase in effects, when viewed in combination with other wind turbines forming part of the visual baseline.
- 6.416 It is also noted however that in any given view where turbines are already present, the additional effect on visual amenity of introducing further turbines may not have as great an effect as the initial introduction of turbines. Furthermore, in general the greater the number of turbines in the baseline view, the less significant the addition of further turbines may be. It is also recognised however that a slight additional effect on top of an existing effect, which at present is not quite significant, could in theory tip the balance such that the overall effect is deemed to be significant.

- 6.417 Again, generally speaking, such additional cumulative effects would arise where a visual receptor would now lie between a cumulative wind farm in one direction and the revised development in a different direction, such that the visibility of turbines as a result of the addition of the revised development would become notable in multiple, usually directly opposite, directions.

Cumulative 'in combination' Visual Effects

- 6.418 An 'in combination' cumulative visual effect is the term used to refer to the situation where a viewer is able to see one or more further wind farms, in addition to the revised development, whilst standing in the one location. These effects are either 'simultaneous,' where the viewer can see the additional turbines in the same angle of view, or 'successive,' where the viewer can see the additional turbines in a different angle of view by turning their head.
- 6.419 As set out in the main assessment, there are many locations where other existing wind turbines are seen in views from the landscape in and around the revised development. In particular, the more elevated viewpoints such as Viewpoints 6, 7, 10, 12-16, and A-D have views of several existing developments at various more distant locations across the extent of the Caithness & Sutherland landscape, particularly from more hilly or mountainous areas.

Cumulative Scenario One – Other Consented Developments are also considered to be Operational

- 6.420 In this cumulative scenario (where other consented developments are also considered to be operational) there would be five additional developments: Creag Riabhach Extension, Chleansaid, Strath Tirry, Achany Extension, and Sallachy 2nd Submission. Each of the developments are located to the north-east, south-east, south, and south-west of the Site at varying distances between 3km and 14km.
- 6.421 The CZTV prepared for the consented developments within 20km of the revised development (see **Figure 6.35**) illustrates the potential for visibility of the revised development with one or other of the developments from much of the landscape in all directions within 10km of the revised development before fragmenting to more elevated areas to the north, east, and west of the Site. The combined visibility pattern remains relatively consistent to the south and south-east of the study area. The cumulative wirelines included with the visualisations (see **EIAR Volumes 3 and 5**) illustrate the relationship between the sites and show that in reality much of the theoretical visibility shown on the CZTV would be no more than blade tips, with greater visibility seen in viewpoints from more elevated locations; albeit often at increased distances from the viewer (e.g. **Viewpoints 6, 7, 10, 12, 13, 15, and A-D**).
- 6.422 When reviewing the CZTV to ascertain the additional theoretical visibility the revised development would add across the extents of the 20km study area, there is minimal new areas of land to consider, with the areas illustrating where the revised development would theoretically be the only wind farm visible, largely concentrated at the edges of areas displaying combined visibility of the revised development and one or other consented development. Conversely, **Figure 6.35** illustrates that there would be several large areas across the 20km study area where there is no theoretical prospect to view the revised development, but where there would be visibility of one or other consented developments.

- 6.423 On this basis, it would appear that the introduction of the consented developments into the baseline landscape would extend the existing influence of wind farms present in views from across the extents of the 20km study area.
- 6.424 Whilst the addition of the revised development would extend the influence of wind turbines in views from certain locations, the presence of the consented developments means the revised development would not result in any change to the solus effects identified in the main assessment, nor would it introduce a cumulative significant effect.
- 6.425 Indeed, the future baseline conditions brought about the consented developments would have the potential to reduce the solus effects attributed to the revised development either by:
- Introducing wind turbines into views void of visibility of any existing developments.
 - Owing to the proximity of the consented sites to the existing operational wind energy development which has already been considered in the main assessment, i.e. the extension developments at Creag Riabhach and Achany; or
 - Owing to one or other consented development appearing in the foreground of the view, serving to reduce the potential for visual effects as a result of the revised development, as shown in Viewpoints 6, and 12.
- 6.426 Consequently, the predicted cumulative visual effects, are judged to be no greater than those identified in the main assessment during daylight and darkness hours.
- 6.427 Cumulative Scenario Two – Other In-Planning Developments are also considered to be Operational this cumulative scenario (where other developments in planning are also considered to be consented and operational) there would be three further additional developments to consider: Shinness, which would be located around 5km to the south-east, Sallachy Extension Turbine that would be located around 6km to the west, and Allt An Tuir, which would be located around 17km to the south of the revised development.
- 6.428 The cumulative ZTV prepared for the in-planning developments within 20km of the revised development (see **Figures 6.36**) illustrates the potential for visibility of the revised development with Shinness, Sallachy Extension, or Allt An Tuir from large parts of the landscape.
- 6.429 In the context of the existing wind energy development at Achany and Rosehall, the Allt An Tuir development is judged to have minimal potential to result in any cumulative effects on views when witnessed with the revised development, beyond those already set out in the main assessment.
- 6.430 The Sallachy Extension would add one further turbine to an existing consented wind farm, where it would appear as a legible lateral extension in views. In this context, the revised development is judged to have minimal potential to result in any cumulative effects on visual amenity, beyond those already set out in the main assessment.
- 6.431 In the case of the Shinness development, this has the potential to be seen simultaneously with the revised development in **Viewpoints 3, 6-16, and A-D**. Indeed, in several viewpoints, including **Viewpoints 8, 9, and 11**, the Shinness development would be seen in the very foreground of the view.
- 6.432 The presence of the Shinness development would serve to reduce the potential for visual effects from the revised development by its addition serving to further establish wind energy as a visual component in the wider landscape. Whilst true, it is recognised that

Shinness and the revised development would often appear in views as discrete wind farms, adding further turbines in a different part of the landscape from the existing baseline and consented developments.

- 6.433 When considering that the consented developments are predicted to lower the effects predicted when assessing the effects of the revised development against the current baseline conditions, the resulting change – and predicted rise in effects - brought about by the introduction of the revised development and Shinness is ultimately predicted to be no different to the judgements presented in the main assessment across daylight and darkness hours.

Cumulative 'Sequential' Effects

- 6.434 A 'sequential' cumulative visual effect is the term used to refer to the situation where a viewer is able to see one or more further wind farms in addition to the revised development, whilst travelling along a linear route. This could be either on foot, whilst walking on a footpath, or by bicycle or car along a public road. The main assessment focussed on the following routes which were identified as having the greatest potential to experience significant effects as a result of the revised development and these were also used as the basis for the cumulative assessment:

- Core Path SU16.03 Ord Hill.
- Core Path SU16.10 Loch Craggie.
- Core Path SU16.05 Loch Shin Hide.
- John O'Groats Cycle Route.
- A838.
- A836.
- A839.
- Moray Firth Tourist Route.

- 6.435 The Core Paths listed above that were considered in the main assessment lie to the north-east, south-east, south, west, and north-west of the Site, at varying distances exceeding 15km from the revised development. Along various points of the Core Paths there are views of existing turbines. The main assessment identified no more than **moderate/ minor**, not significant effects on the above Core Paths. There would be no further significant cumulative effects in addition to those identified for the revised development in its own right.

- 6.436 The John O'Groats Cycle Route is a moderately long-distance recreational route. No sections of the route, which utilises the A836, lie in proximity of the revised development, with the closest point of the route lying over 5km east of the nearest proposed turbine.

- 6.437 Along various points of its length there are views of existing turbines, with both the consented and in-planning developments also likely to be visible from the route to varying degrees as it passes through the eastern part of the 20km study area. The main assessment identified a **major/ moderate** and significant effect on the route during daylight hours from an approximately 5km stretch as the route passes near The Crask Inn, with proposed turbines serving to reinforce the visibility of wind energy along the route as a whole. There would be no further significant cumulative effects in addition to those identified for the revised development in its own right. For the remaining sections of the route, effects were judged as being no greater than **moderate/ minor** and not significant. Given the route utilises the A836, the results of this assessment for the John O'Groats Cycle Route are

considered to be consistent with those that would be identified for the A836. No further assessment is therefore provided for A836.

- 6.438 The A838 is a long road that extends from Lairg to Tongue. The A838 extends from the junction with the A836 to the south-east of the Site, where it passes along the north-western edge of Loch Shin, up to the southern edge of the Site. Beyond the Site, the road heads to the north-west passing Loch a Ghriama, Loch Merkland and Loch More. The A838 extends up to Durness and then follows the northern coast where it terminates at Tongue.
- 6.439 Sections of the A838 lie in proximity to the revised development, with the closest point of the road lying approximately 850m to the south of a proposed turbine at its closest point. Across the section of the route that extends between Lairg and the Site, there is periodic spells of visibility of existing wind energy; with visibility becoming more limited beyond approximately 4km to the west of the Site, which is also true when reviewing the visibility patterns attributable to the revised development. The main assessment identified **moderate** significant effects during daylight and darkness hours across sections of the A838 south-east of the nearest proposed turbines up to approximately 5km, with further **moderate** significant effects predicted during daylight hours only between 5km and 8km to the south-east, with the proposed turbines serving to reinforce the visibility of wind energy along the A838 between the Site and Lairg. As a result, there would be no further significant cumulative effects in addition to those identified for the revised development in its own right.
- 6.440 The A839 is a moderately short transport road that extends between Loch Fleet and Rosehall in southern Sutherland. The A839 passes through Lairg where it is located approximately 19km to the south-east of the revised development at its closest point. The road provides a route from Rosehall to the A9 near Golspie where it follows Strath Fleet. Along various points of its length there are views of existing turbines. The main assessment identified a **minor**, not-significant effect. There is not considered to be any further significant cumulative effects in addition to those identified for the revised development in its own right.
- 6.441 The Moray Firth Tourist Route also passes through the study area, approximately 19km to the south-east at its closest point. The route follows the A839 east of Lairg, as well as the A836 to the south of Lairg. Along various points of its length there are views of existing turbines. The main assessment identified a **minor** not significant effect on the route. The potential for the effects of the revised development to result in significant cumulative effects once the other consented and in-planning developments are also included has been considered and no further significant cumulative effects have been identified.

Totality of the Combined Effects of all Developments

- 6.442 Consideration has also been given to the overall totality of the cumulative visual effect when the revised development is considered alongside the other operational, consented, and in-planning developments.
- 6.443 The closest operational developments to the revised development are the Creag Riabhach development that comprises 22no. turbines and lies approximately 7.5km to the north-east of the Site, and the Achany and Rosehall developments that comprise 19no. turbines each, and that both lie approximately 16km-17km south-east of the revised development. Other operational developments are located beyond 20km, to the north-east, south-east, and south of the revised development.

- 6.444 The CZTV prepared for the operational developments (see **Figures 6.31 and 6.34**) illustrates the potential for visibility of the revised development with one or other of the developments from much of the landscape, in particular from higher ground.
- 6.445 Overall, collectively the operational developments serve to result in wind energy being seen as a notable feature in many views in the landscape of the wider study area to the north-east, south-east, and south of the Site. The addition of the revised development would serve to reinforce this pattern of wind energy, albeit extending the significant effects into a separate area further to the north and west.

Scoping/ Pre-Application Developments

- 6.446 As shown on **Figure 6.29**, there are three scoping/ pre-application stage developments located within 20km of the Site: Invercassley and Fionn Wind Farms, which lie over 15km to the south south-west of the revised development, and Creag Dhubh Wind Farm that is located approximately 19km to the south-east. As noted previously, due to the relative uncertainty and detail about scoping/ pre-application stage developments, the projects have not been included in the main cumulative assessment. This is in accordance with the approach advocated in GLVIA3. It is acknowledged however that were the developments to become operational, then the overall totality of the landscape character and visual effects of wind turbines in the study area in the vicinity of the three sites would increase.
- 6.447 The visualisations prepared in support of the LVIA from the agreed viewpoint locations illustrate the limited potential for visibility of the revised development with the Invercassley and Fionn developments from much of the landscape, with any simultaneous views primarily to the south and west of the Site and largely from more elevated areas. In particular, the Invercassley and Fionn developments would be seen simultaneously with the revised development in **Viewpoints 2, 5, 7, 13, A-D**.
- 6.448 In **Viewpoint D**, the Invercassley and Fionn turbines would be seen in the middle-distance of the view. In that instance, the presence of the Invercassley and Fionn developments would serve to reduce the potential for visual effects from the revised development; whilst acknowledging that the Coille Beith development would be a more prominent development in the foreground of the view than either the revised development or Invercassley and Fionn.
- 6.449 The Invercassley and Fionn developments would be located across LCT 135: Rounded Hills -Caithness & Sutherland, serving to establish the presence of wind energy as a characteristic of this LCT which would reduce the potential impact of the revised development on the character of this area.
- 6.450 For both landscape character and visual receptors in the landscape between the two sites and the Site there is the potential for an increase in effects as a result of the revised development being seen in views in the opposite direction to the Invercassley and Fionn developments. This would likely relate primarily to intervening landscapes, and recreational walkers on elevated areas of land; whilst acknowledging that potential successive views may be possible from the A836, the A838, the John O'Groats Cycle Route, and those residential properties which lie between the revised development and the Invercassley and Fionn turbines.
- 6.451 Whilst the combination of the revised development and the Invercassley and Fionn developments would add further turbines, increasing the influence of wind farms in certain landscapes and views, the majority of time there would be no or minimal prospect for

intervisibility between the two sites and the Site owing to screening provided by intervening landform and tree cover, and/ or attenuation by distance.

- 6.452 As demonstrated in the visualisations, there is similarly limited potential for visibility of the revised development with the Creag Dhubh turbines, with any simultaneous views primarily from more elevated areas, including **Viewpoints 6, 7, 12, A-D**. In such instances, the Creag Dhubh turbines would be seen in the context of the consented Chleansaid and Strath Tirry developments. The revised development and the Creag Dhubh developments would generally be viewed alongside the existing Creag Riabhach and its consented extension, the consented Chleansaid, Strath Tirry, and Sallachy 2nd Submission (including proposed extension), and the in-planning Shinness.
- 6.453 When considering potential effects during darkness hours, the assumption is that one or more developments would be operating on a proposed aviation lighting mitigation design when viewed owing to distance; although, this would be dependent on any application coming forward for Invercassley, Fionn, or Creag Dhubh, and their proposed aviation lighting mitigation design.
- 6.454 When considering all the above factors, it is judged that there would not be any change to the results presented in the assessment during daylight or darkness hours when assessing the effects of the revised development against the current baseline conditions.

Summary of Cumulative Effects

- 6.455 It is acknowledged that wherever more than one wind farm is visible at any given location in the landscape, there will be a greater overall or cumulative effect on landscape character and visual amenity than if just one wind farm was visible in the landscape. Likewise, it is acknowledged that the more wind turbines that are constructed in any given landscape, the greater the magnitude of overall (or combined) change to the landscape character or views.
- 6.456 At the time of preparing this LVIA, there were 14no. other wind farms within the detailed 20km cumulative study area which were either operational, under construction, or in-planning, including the Invercassley, Fionn, and Creag Dhubh developments, that are all at scoping/ pre-application stage.
- 6.457 Of these, the only development which the revised development would have the potential to give rise to significant cumulative effects in combination with is the Shinness development. The cumulative wirelines included with the visualisations illustrate the relationship between the revised development and Shinness and show that in many views, both developments would be seen simultaneously.
- 6.458 Were Shinness included in the baseline landscape, the subsequent introduction of the revised development, would result in the potential for additional localised significant cumulative effects on the landscape character of LCT 134: Sweeping Moorland and Flows (Strath Fiag/Tirry unit) and LCT 135: Rounded Hills Caithness & Sutherland (Loch Shin Rounded Hills unit). The Shinness turbines would also reinforce the other localised significant effects identified on landscape character and on visual receptors in close proximity to the Site.
- 6.459 In saying that, when considering that the presence of the consented developments is judged to lower the effects predicted when assessing the effects of the revised development against the current baseline conditions, the resulting change – and subsequent predicted rise in effects - brought about by the introduction of the revised

development and Shinness is ultimately predicted to be no different to the judgements presented in the main assessment across daylight and darkness hours.

- 6.460 Consideration has also been given to the overall totality of the cumulative landscape and visual effects when the revised development is considered alongside the other operational, consented, and in-planning developments. Collectively, the various operational, consented, and in-planning developments would serve to result in wind energy being seen as a notable feature in many views in the landscape of the wider study area. The addition of the revised development would serve to reinforce this pattern, particularly in combination with the proposed Shinness development, albeit extending the significant visual and character effects into a separate area further to the north and west within the landscape.

Summary

- 6.461 This chapter presents the findings of the Landscape and Visual Impact Assessment (LVIA) and identifies the likely significant effects arising from the revised development on landscape character and visual amenity. It has been informed by field visits and by consultation undertaken with statutory consultees including The Highland Council (THC) and NatureScot.

Landscape and Visual Baseline Summary

- 6.462 The existing landscape and visual baseline has been documented, and the assessment has been supported by figures (see **Volume 2**) as well as visualisations produced to NatureScot (see **Volume 3**) and THC (see **Volume 5**) visualisation standards that show representative views from locations consulted on at scoping that illustrate existing and proposed views during daylight hours from all 20no. agreed LVIA viewpoints as well as viewing during darkness hours from a select number of viewpoint locations (presented in **Volumes 3 and 5**).
- 6.463 The Site forms part of an active commercial coniferous forestry plantation, dominated by a mixture of sitka spruce and lodgepole pine. The Site lies to the north of the A838 and Loch Shin, approximately 18.5km to the north-west of Lairg.
- 6.464 The closest settlement to the proposed wind farm is Overscaig, located approximately 3.25km to the south-west of the Site. The nearest main trunk road is the A838 which runs adjacent to the southern boundary of the Site.
- 6.465 There are no national landscape designations covering the Site. The nearest National Scenic Area (NSA) is Assynt-Coigach, which lies approximately 9.5km to the west. The revised development is also not located within a locally designated landscape. The nearest locally designated landscape is the Ben Klibreck and Loch Choire Local Landscape Area (LLA) that lies approximately 9.5km to the east-northeast of the Site. A number of other NSAs and LLAs lie within 45km of the Site. The Site lies near Wild Land Area (WLA) 37. Foinaven - Ben Hee.
- 6.466 The proposed turbines and associated infrastructure are located within NatureScot Landscape Character Type (LCT) 134: Sweeping Moorland and Flows (*Strath Fiag/ Tirry unit*), with the southern boundary of the Site located adjacent to NatureScot LCT 135: Rounded Hills – Caithness & Sutherland.

Embedded Mitigation Summary

- 6.467 The primary mitigation adopted to reduce potential landscape and visual effects is embedded within the design.
- 6.468 The design rationale adopted sought to avoid inconsistent turbine spacing, large gaps, outliers or excessive overlapping of turbines, to reduce visual effects and ensure a balanced/ compact array from key views.
- 6.469 The EIA scoping layout was based on 22no. proposed turbines with blade tip heights up to 230m. The layout then progressed through a series of smaller iterations based upon ground conditions and landscape and visual considerations. Visual considerations were a key consideration with turbines removed to reduce the lateral extents of the wind farm from key viewpoints; however, noting the minor increase in height up to 250m.
- 6.470 Post submission, a number of iterations to the design were made in response to consultee feedback, culminating in the revised development which comprises a 15no. proposed turbine layout with reduced blade tip heights from 250m to a mixture of 200m-230m. At the request of THC, T3 and T5 were also located downslope from the hilltop of Meall Odhar.
- 6.471 A reduced visible aviation lighting scheme has been agreed with the CAA to reduce the number of aviation warning lights. Mitigation of visible turbine lighting has been embedded into the lighting design to reduce the intensity of the 2000 candela (cd) steady state lights in certain atmospheric conditions by reducing their intensity and attenuating the amount of vertical downward lighting in order to reduce the visual impact experienced by receptors below the lights (to 200cd).
- 6.472 As with almost any onshore wind farm development and acknowledged by Policy 11(e)(ii) of NPF4, it is recognised that the revised development would give rise to some localised significant effects on landscape character and visual amenity.
- 6.473 Wind turbines give rise to a wide spectrum of opinions, ranging from strongly adverse to strongly positive, with a wide range of opinions lying somewhere between these two positions. Some people view wind turbines as incongruous or industrial structures whilst others view them as aesthetically pleasing, elegant structures, and a positive response to climate change. In the case of the revised development, the turbines and associated ancillary development may be viewed by some as a symbol of continued progress by society towards a low carbon future.
- 6.474 In considering the effects of the revised development, a precautionary approach has however been adopted, and it is therefore assumed that the effects identified would be adverse in nature even though it is recognised that for some people the impacts could be perceived to be beneficial.
- 6.475 There are no definitive quantifiable thresholds of acceptability in landscape and visual impact assessment (LVIA). The identified effects on landscape character and visual amenity therefore need to be balanced against the other benefits of the revised development in the overall planning balance.

Summary of Effects on Landscape Character

- 6.476 The revised development would result in direct and significant effects on the parts of the 'host' landscape character type (LCT), LCT 134: Sweeping Moorland and Flows (*Strath Fiag/ Tirry unit*), within which the revised development is located as well as some indirect significant effects up to a distance of approximately 8km to the north-east, east, and

south-east. Indirect and significant effects would occur to parts of the neighbouring LCT 135: Rounded Hills – Caithness & Sutherland including up to 5km to the south-west and south, up to 8km to the west and south-east, and up to approximately 5km to the north-west, north, and north-east. All other effects upon LCTs would be not significant.

Summary of Visual Effects

- 6.477 In relation to visual effects, it is accepted that the revised development would be visible from various nearby properties and settlements, as well as parts of the surrounding road, footpath, and cycle networks.
- 6.478 It has been assessed that there would be significant visual effects experienced at eight of the 20. representative viewpoints during daylight hours. During darkness hours, significant effects are predicted at only three of the 20no. agreed LVIA viewpoints, namely at **Viewpoint 1: A838 near Fiag Bridge, Viewpoint 2: Loch Fiag and Viewpoint 4: A838 near Sithean Dubh Mor.**
- 6.479 In terms of the effects on residential properties within 4km, the Residential Visual Amenity Assessment (RVAA) (see **Technical Appendix 6.6**), found that one of the seven properties assessed would experience a significant visual effect from either a part of their house, garden, or principal access route (at Taigh Na Dreoilin/ East Overscaig). It is however concluded that none of the residents of any occupied private property would experience such an overbearing or overwhelming effect on their visual amenity that their properties would become unattractive places in which to live.
- 6.480 In relation to settlements, the assessment found that the settlement of Shinness, located approximately 8.5km to the south-east, would experience significant visual effects during daylight hours. An individual property, namely Aultnacoarach located approximately 4.7km to the south-east, would experience significant effects during daylight hours and hours of darkness.
- 6.481 The assessment of recreational receptors found receptors on the John o' Groats Cycle Route (and thereby the A836) would experience significant effects during daylight hours on the section of the route that passes near The Crask Inn to the east. All other effects upon recreational receptors during daylight and hours of darkness are deemed to be not significant.
- 6.482 The assessment of roads found that receptors would experience significant effects during daylight hours from sections of the A838 up to approximately 8km to the south-east of the revised development. All other effects upon roads during daylight and hours of darkness are deemed to be not significant.

Summary of Effects on Assynt-Coigach NSA

- 6.483 In terms of effects on the Assynt–Coigach NSA. Five of the ten Special Landscape Qualities (SLQs) were identified as requiring further analysis and assessment. In summary, the assessment did not identify any significant effect on the five SLQs assessed in detail. Therefore, it is concluded that the overall integrity of the NSA would not be compromised.

Summary of Effects on Local Landscape Areas

- 6.484 Regarding Ben Klibreck and Loch Choire LLA. Whilst it is acknowledged that there would be some localised effects upon landscape character and visual amenity experienced from a small part of the LLA and some influence upon two out of the four SLQs of the LLA, overall, there would not be significant effects upon the special qualities of the Ben Klibreck

and Loch Choire LLA. Therefore, the addition of the revised development was judged to not undermine the understanding or appreciation of the underlying landscape of the LLA or its special qualities.

Summary of Cumulative Landscape and Visual Effects

- 6.485 Regarding cumulative effects, it is acknowledged that wherever more than one wind farm is visible at any given location in the landscape, there will be a greater overall or cumulative effect on landscape character than if just one wind farm was visible in the landscape. Likewise, it is acknowledged that the more wind turbines that are constructed in any given landscape, the greater the magnitude of overall (or combined) change to the landscape character.
- 6.486 At the time of preparing this LVIA, there were 11 no. other wind farms within 20km of the Site which were either operational, under construction, or in-planning, plus the Invercassley, Fionn and Creag Dhubh developments, which are at scoping/ pre-application stage.
- 6.487 In the first cumulative scenario considered (where other consented wind farms are also considered to be operational), there would be five additional developments: Creag Riabhach Extension, Chleansaid, Strath Tirry, Achany Extension, and Sallachy 2nd Submission. Each of the developments are located to the north-east, south-east, south, and south-west of the Site at varying distances between 3km and 14km.
- 6.488 In the cumulative assessment, it was recognised that the introduction of the consented developments into the baseline landscape would extend the existing influence of wind farms present in views within 20km of the Site.
- 6.489 Whilst the addition of the revised development would extend the influence of wind turbines in views from certain locations, the presence of the consented developments means the revised development would not result in any change to the solus effects identified in the main assessment, nor would it introduce a cumulative significant effect.
- 6.490 Indeed, the future baseline conditions brought about the consented developments would have the potential to reduce the solus effects attributed to the revised development either by:
- Introducing wind turbines into views void of visibility of any existing developments.
 - Owing to the proximity of the consented sites to the existing operational wind energy development which has already been considered in the main assessment, i.e. the extension developments at Creag Riabhach and Achany; or
 - Owing to one or other consented development appearing in the foreground of the view, serving to reduce the potential for visual effects as a result of the revised development, as shown in **Viewpoint 6: Maovally and Viewpoint 12: Ben More Assynt**.
- 6.491 Consequently, the predicted cumulative visual effects, are judged to be no greater than those identified in the main assessment during daylight and darkness hours.
- 6.492 In the second cumulative scenario (where other developments in-planning are also considered to be consented and operational) there would be three further additional developments to consider: Shinness, which would be located around 5km to the south-east, Allt An Tuir, which would be located around 17km to the south of the revised development, and the single turbine extension proposed at the consented Sallachy development.

- 6.493 In the context of the existing wind energy development at Achany and Rosehall, the Allt An Tuir development is judged to have minimal potential to result in any cumulative effects on views when witnessed with the revised development, beyond those already set out in the main assessment.
- 6.494 The Sallachy Extension would add one further turbine to an existing consented wind farm. In this context, the revised development is judged to have minimal potential to result in any cumulative effects on landscape character, beyond those already set out in the main assessment.
- 6.495 In the case of the Shinness development, this has the potential to be seen simultaneously with the revised development in **Viewpoints 3, 6-16, and A-D**. Indeed, in several viewpoints, including **Viewpoints 8, 9, and 11**, the Shinness development would be seen in the very foreground of the view.
- 6.496 The presence of the Shinness development would serve to reduce the potential for visual effects from the revised development by its addition serving to further establish wind energy as a visual component in the wider landscape. Whilst true, it is recognised that Shinness and the revised development would often appear in views as discrete wind farms, adding further turbines in a different part of the landscape from the existing baseline and consented developments.
- 6.497 When considering that the consented developments are predicted to lower the effects predicted when assessing the effects of the revised development against the current baseline conditions, the resulting change – and predicted rise in effects - brought about by the introduction of the revised development and Shinness is ultimately predicted to be no different to the judgements presented in the main assessment across daylight and darkness hours.
- 6.498 There are three scoping/ pre-application stage developments located within 20km of the Site: Invercassley and Fionn Wind Farms, which lie beyond approximately 15km to the south south-west of the revised development, and Creag Dhubh Wind Farm that is located approximately 19km to the south-east. Were these developments included in the baseline landscape, alongside the revised development, the combination would add further turbines, increasing the influence of wind farms in certain landscapes and views. The majority of time there would however be no or minimal prospect for intervisibility between these developments and the revised development owing to screening provided by intervening landform and tree cover, and/ or attenuation by distance.
- 6.499 As demonstrated in the visualisations, there is similarly limited potential for visibility of the revised development with the Creag Dhubh turbines, with any simultaneous views primarily from more elevated areas, including **Viewpoints 6, 7, 12, A-D**. In such instances, the Creag Dhubh turbines would be seen in the context of the consented Chleansaid and Strath Tirry developments. The revised development and the Creag Dhubh developments would generally be viewed alongside the existing Creag Riabhach and its consented extension, the consented Chleansaid, Strath Tirry, and Sallachy 2nd Submission (including proposed extension), and the in-planning Shinness.
- 6.500 As a result, it is judged that there would not be any change to the results presented in the assessment during daylight or darkness hours when assessing the effects of the revised development against the current baseline conditions. Indeed, the future baseline conditions brought about the scoping/ pre-application developments would have the potential to reduce the solus effects attributed to the revised development, in a similar manner to the changes brought by the introduction of the consented developments.

- 6.501 With regards to the Totality of the Combined Effects of all developments, the closest operational developments to the revised development are the Creag Riabhach development that comprises 22no. turbines and lies approximately 7.5km to the north-east of the Site, and the Achany and Rosehall developments that comprise 19no. turbines each, and that both lie approximately 16km-17km south-east of the revised development. Other operational developments are located beyond 20km, to the north-east, south-east, and south of the revised development.
- 6.502 Overall, collectively the operational developments serve to result in wind energy being seen as a notable feature in many views in the landscape of the wider study area to the north-east, south-east, and south of the Site. The addition of the revised development would serve to reinforce this pattern of wind energy, albeit extending the significant effects into a separate area further to the north and west.

Conclusions

- 6.503 It is important to acknowledge that localised significant effects on landscape character and visual amenity are inevitable as a result of commercial wind energy development anywhere in the UK. Whilst the LVIA identified some significant landscape and visual effects, it is considered that the landscape has the capacity to accommodate the effects identified.
- 6.504 Appropriate design mitigation has been embedded into the design of the revised development to limit the extent of significant landscape character and visual effects to within 10km from revised development; although, significant effects do not extend across the whole of this area.
- 6.505 The majority of effects within this area are **not significant**. There are extensive tracts of land beyond 10km of the revised development to the north, east, and west in particular where there is no theoretical visibility of the revised development and consequently no effects are experienced, as illustrated by the blade tip and hub height ZTVs at **Figure 6.3 to Figure 6.9** (see **Volume 2 of this EIA Report**).
- 6.506 Significant visual effects experienced by receptors using core paths, recreational routes and roads within this extent are confined to very short, limited sections of the overall routes and the remainder of the routes either experience effects that are **not significant** or no effects at all where there is no theoretical visibility, as detailed in **Table 6.13: Summary of Residual Effects** below.

Table 6.13: Summary of Residual Effects

Likely Significant Effect	Mitigation	Means of Implementation	Residual Effect
During Construction			
Effects on existing landscape features	No additional mitigation – consideration of landscape and visual	By design	Worst case Moderate/ minor non-significant effect to commercial coniferous forestry plantation and to

	matters was inherent in the design process		watercourses and drainage channels.
Effects on LCTs within which the revised development is located	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Moderate significant effect to the part of LCT 134: Sweeping Moorland and Flows (<i>Strath Fiag/Tirry unit</i>) where the revised development would be located in.
Indirect effects to other LCTs	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Moderate not-significant effects to parts of surrounding LCTs, including LCT 135: Rounded Hills Caithness & Sutherland (<i>Loch Shin Rounded Hills unit</i>) and LCT 135: Rounded Hills Caithness & Sutherland (<i>Loch Fiag Rounded Hills unit</i>).
LVIA Viewpoints	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Moderate not-significant effects from six viewpoints.
Visual effects	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Moderate non-significant temporary effect from the A838.
During Operation			
Effects on LCTs within which the revised development is located	No additional mitigation – consideration of landscape and visual	By design	Worst case Moderate significant effects extending up to approximately 8km to LCT 134: Sweeping

	matters was inherent in the design process		Moorland and Flows (<i>Strath Fiag/Tirry unit</i>).
Indirect effects to other LCTs	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Major/ moderate significant effects extending to approximately 5km from the revised development on LCT 135: Rounded Hills Caithness & Sutherland (<i>Loch Shin Rounded Hills unit</i>) and LCT 135: Rounded Hills Caithness & Sutherland (<i>Loch Fiag Rounded Hills unit</i>).
LVIA Viewpoints during daylight hours	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Significant effects from 8no. of the 20no. LVIA Viewpoints Major significant effects from Viewpoint 2: Loch Fiag.
LVIA Viewpoints during darkness hours	Reduced aviation lighting design proposed	By design	Worst case Significant effects from 3no. of the 20no. LVIA Viewpoints Major/ moderate significant effects from Viewpoint 2: Loch Fiag.
Effects on settlements/ properties during daylight hours	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Significant effects from Aultnacoarach and Shinness Major/ moderate significant effect from Aultnacoarach.
Effects on settlements/ properties during darkness hours	Reduced aviation lighting design proposed	By design	Worst case Significant effects from Aultnacoarach

			Moderate significant effect from Aultnacoarach
Effects on recreational receptors during daylight hours	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Major/ moderate significant effect from John O'Groats Cycle Route – near The Crask Inn to the east.
Effects on recreational receptors during darkness hours	Reduced aviation lighting design proposed	By design	Worst case Moderate non-significant effect from John O'Groats Cycle Route – near The Crask Inn to the east.
Effects on road users during daylight hours	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case Major/ moderate significant effect from A836 (John O'Groats Cycle Route) – near The Crask Inn to the east. Moderate significant effects from the A838 up to 8km to the south-east.
Effects on road users during darkness hours	Reduced aviation lighting design proposed	By design	Worst case Moderate significant effects from the A838 up to 5km to the south-east.
Effects on designated landscapes	No additional mitigation – consideration of landscape and visual matters was inherent in the design process	By design	Worst case No significant effects from designated landscapes.

Bold text indicates a significant effect.

7 CULTURAL HERITAGE

- 7.1 This chapter addresses the likely significant effects of the Revised Development on Archaeology and Cultural Heritage. It draws on Chapter 7: Archaeology and Cultural Heritage of the 2025 EIAR and should be read in conjunction with that document and associated Technical Appendices.
- 7.2 This assessment briefly considers any changes to the baseline since completion of the 2025 EIAR. Having established the heritage baseline, an assessment is made of the potential for significant effects on archaeological features and heritage assets resulting from the construction, operation, and decommissioning of the Revised Development.

Consultation Responses

- 7.3 Historic Environment Scotland (HES) provided a response to the application (21/00849/FUL) on 18th July 2025.
- 7.4 HES concluded that the impact did not raise issues in the national interest, and therefore did not object to the proposal.

Baseline Conditions

- 7.5 The baseline outlined in Chapter 7 of the 2025 EIAR is unchanged for the Revised Development.

Identification and the Evaluation of Key Impacts

Potential Effects

- 7.6 Following the change in design a re-assessment of the key impacts identified in the 2025 EIAR has been undertaken. This section considers the likely significant environment effects resulting from the construction and operation of the Revised Development.

Construction Effects

- 7.7 The 2025 EIAR concludes that construction effects on cultural heritage receptors are limited to direct impacts on heritage assets within the Proposed Development Site.
- 7.8 The Revised Development has been designed, to avoid direct impacts on known heritage assets.
- 7.9 There have been no changes to the heritage baseline within the Proposed Development Site since the 2025 EIA Report. As there are no anticipated direct physical changes to known assets, there will be no effect.
- 7.10 Direct effects upon any previously unknown archaeological remains which may be present on the Proposed Development Site would cease with the completion of the

groundworks stage of construction and consequently no direct effects are predicted during the operational phase.

Operational Effects

- 7.11 Operational effects include potential impacts upon the settings of designated assets such as Listed Buildings, Scheduled Monuments, Conservation Areas and Inventory Battlefields and Inventory Gardens and Designed Landscapes (GDLs).
- 7.12 The changes in hub height and rotor diameter would result in a reduction in the proportions of turbine elements visible from each heritage asset assessed in the 2025 EIAR. In each case this change in visibility would be marginally less and, in many cases, would not be perceptible as a change. The overall reduction in height of T5 from 200m to 190m would also reduce visibility. The overall magnitude of impact and associated level of effect identified for each asset would remain as set out in the EIAR.

Summary

- 7.13 The baseline is unchanged from the 2025 EIAR. No direct impacts are anticipated on known archaeological remains from the Revised Development.
- 7.14 The conclusions of the 2025 EIAR regarding setting effects upon designated assets within 10km of the Proposed Development Site are unchanged, albeit that the Revised Development would result in a reduction in the proportion of turbines visible from certain assets.

8 ECOLOGY

Introduction

- 8.1 This FEI chapter addresses the likely significant effects of the Revised Development on ecology. It draws upon Chapter 8: Ecology of the EIAR and this section of the FEI should be read in conjunction with the EIAR and the associated Technical Appendices.
- 8.2 The layout proposed by the Revised Development for this FEI sees the relocation of the substation compound and retains the location of the proposed turbines. For details of the repositioning of the substation and changes to turbine tip height please refer to Chapter 3 of this FEI.

Key Conclusions of the EIA

- 8.3 An ecological study was undertaken as part of the EIAR, including an assessment of designated and non-designated sites within 5km of the Proposed Development, habitat, bat, and other protected species surveys. Evidence of several important ecological features was found, including bats, habitats, otter, reptiles, and fish, however no significant effects were predicted on these species as a result of the Proposed Development.
- 8.4 Habitat loss as a result of the Proposed Development was considered, with the overall magnitude of any habitat loss associated with the Proposed Development assessed as low and minor/not significant. Mitigation measures for peat disruption and mitigation were proposed to minimise disruption to any blanket bog habitats and other associated areas, with early restoration following the construction phase proposed.
- 8.5 A combination of embedded design features and best-practice mitigation measures resulted in no significant effects being assessed as a result of the Proposed Development.

Consultation

- 8.6 NatureScot responded to the EIAR consultation with no objection and stated that their previous assessment and advice remained unchanged.

Assessment of Effects Update

- 8.7 The design changes for the Revised Development (as detailed in Chapter 4 of this FEI) have been reviewed against the baseline data collated to support the Proposed Development's EIAR submission.

Summary

- 8.8 The Revised Development has been amended to take account of statutory consultees comments with respect ecology and would not alter the effects of the proposal, which were previously assessed as not significant.

9 ORNITHOLOGY

Introduction

- 9.1 This chapter provides an updated assessment of potential impacts and associated effects on ornithological features relevant to the Revised Development as described in Chapter 4, Volume 1 and shown on FEI Figure 4.1, Volume 2 of this FEI. It draws on Chapter 9: Ornithology of the 2025 EIAR and should be read in conjunction with that document and associated Technical Appendices.
- 9.2 This assessment briefly considers any changes to the baseline since completion of the 2025 EIAR. Having established the ornithology baseline, an assessment is made of the potential for significant effects on ornithology resulting from the construction, operation and decommissioning of the Revised Development.

Key Conclusions of the EIAR

Baseline description

Baseline conditions

- 9.3 The baseline conditions remain as described in the 2025 EIAR.

Legislation, Policy and Guidance

- 9.4 There have been no changes to legislation, planning policy and guidance which could affect, alter, or amend the assessment being undertaken since the submission of the 2025 EIAR.

Assessment Methodology and Significance Criteria

- 9.5 The assessment methodology and significance criteria used remains as described in the 2025 EIAR.

Consultation

- 9.6 No additional consultation was carried out in support of the Revised Development.

Assessment of Effects and Mitigation

- 9.7 The proposed changes mean the amendment of the dimensions for all of turbines and the relocation of turbines 3 and 5.
- 9.8 In ornithological terms, when turbine dimensions are altered, this does result in a change in estimated collision risk, as this is based upon turbine size and swept area.

- 9.9 As a result, the collision risk has been remodelled for all species presented in the 2025 EIAR, using the amended turbine parameters.
- 9.10 The results from modelling for the Revised Development are shown Technical Appendix 9.2. Overall, the amended turbine locations and reduced height resulted in an slight decrease due to the change in swept area.
- 9.11 It can be seen that for all species, the change in collision risk is low; for no species does the predicted loss rise to above one bird over the lifetime of the windfarm, even allowing for the additional mortality as a result of the design changes.
- 9.12 Similarly on a cumulative basis, it is unlikely any deaths would be recorded as a result of the development of a wind farm in this locale, the cumulative effect would be not significant for the development of this Revised Development.
- 9.13 No further mitigation is therefore required as a result of the changes to design; nevertheless, the mitigation described in the 2025 EIAR would be adopted as stated.

Summary

- 9.14 The changes made to the design of the Revised Development are relatively limited. Nevertheless, they did have the potential to impact on collision risk estimates. As a result, the collision risk modelling was rerun for all species which had been considered in the 2025 EIAR.
- 9.15 The results of the modelling show that the changes in mortality associated with the Revised Development are lower and therefore not sufficiently great to alter the assessment of impacts made in the 2025 EIAR; that there would be no significant effects on ornithological receptors on or around the Revised Development and mitigation measures remain as stated in 2025 EIAR.

10 GEOLOGY, HYDROGEOLOGY & HYDROLOGY

10.1 Introduction

10.1.1 This chapter provides Further Environmental Information (FEI) to address the potential effects of the revised layout on hydrology, geology and peat. It supplements Chapter 10: Hydrology, Geology and Peat of the 2025 EIA Report and should be read in conjunction with it.

10.1.2 In response to the 2025 EIA Report, objections were raised by Scottish Environmental Protection Agency (SEPA) in relation to impacts on peat and carbon rich soils and the water environment. The specific objections received from SEPA are outlined below:

- The Option 2 track to T15 runs parallel to a watercourse and on peat up to 2.30 m deep. If this option is pursued the track should be revised to achieve a suitable running distance between infrastructure and the water environment, a perpendicular watercourse crossing and avoid the area of deeper peat.
- The location of the road junction north of T15 is on peat up to 2.10 m deep; the location should be revised to avoid the deeper peat to the south.
- The positioning of T7 which is on peat up to 2.40 m with the approaching track on peat up to 2.20 m deep. The location should be revised to avoid the deeper peat.

10.1.3 In addition to the above following further discussion with The Highland Council in February 2026, it was indicated that if Turbines 3 and 5 in the north-western part of the site were moved east and down slope to reduce their overall height above ordnance datum (AOD).

10.2 Subsequent Design Changes and Additional Baseline Survey

10.2.1 In light of the above comments, the proposed development layout was reviewed and amendments to the layout were made. To mitigate potential impacts to peat and the watercourse that is crossed by the Option 2 track to T15, the route was moved to the south and straightened to avoid areas of deep peat and create a perpendicular water crossing. In addition, the position of the turning head situated to the north of T15 was amended to avoid areas of deep peat. Amendments to the location / orientation of T7 were not considered to be possible due to a number of constraints including areas of deeper peat in areas surrounding the hardstanding and the proximity of nearby watercourse buffers. SEPA were consulted in relation to these proposed changes and considered that the updated route of the Option 2 access track and the turning head to the north of T15 would be acceptable on the condition that additional probing was undertaken to confirm peat depths in the areas in which the relocated infrastructure was proposed to be constructed. SEPA also acknowledged the reasons for retaining T7 in its

proposed location / orientation and requested that justification for this is included within the formal submission.

- 10.2.2 In addition to the above, the locations of T3, T5 and their associated access tracks were moved down slope and to the east to reduce their overall height above ordnance datum.
- 10.2.3 Additional baseline peat assessment was subsequently undertaken to assess the changes described above and to address the issues raised by SEPA / The Highland Council.
- 10.2.4 The additional baseline works included the completion of additional peat probing works in areas of the site where information was considered to be required (primarily the area of the amended Option 2 access track route to T15, the area of the re-aligned turning head situated to the north of T15 and the new hardstanding areas for T3 and T5 and associated access track routes).
- 10.2.5 Full details of the revisions to the proposed layout and justifications for retaining infrastructure in their original positions are presented in FEI Chapter 3: Project Description.
- 10.2.6 Much of the original 2025 Environmental Impact Assessment (EIA) Chapter 10: Hydrology, Geology and Peat are considered to remain valid and unchanged, and therefore, this assessment will direct the reader to relevant documents as appropriate, to avoid repetition. Where there is a difference (for example, new consultation responses or details of additional baseline works) this will be detailed in full in this FEI Chapter 10: Hydrology, Geology and Peat.
- 10.2.7 This chapter is also supported by the following figures as contained within EIAR Volume 2: Figures, which have been updated to include the amended development layout:
- Figure FEI10.1: Superficial Geology;
 - Figure FEI 10.2: Bedrock Geology;
 - Figure FEI 10.3: Soils Mapping;
 - Figure FEI 10.4: Regional Hydrogeology;
 - Figure FEI 10.5: Groundwater Vulnerability;
 - Figure FEI 10.6: Hydrological Features; and
 - Figure FEI 10.7: Private Water Supplies.
- 10.2.8 The chapter is supported by a number of Technical Appendices, which have been prepared and updated in light of the revised development layout:
- Technical Appendix 10.1: Outline Water Crossing Inventory;

- Technical Appendix 10.2: Outline Peat Landslide Hazard Risk Assessment (PLHRA); and
- Technical Appendix 10.3: Outline Peat Management Plan.

10.2.9 Other relevant chapters include Chapter 8: Ecology.

10.3 Methodology

10.3.1 The assessment methodology remains consistent with that presented in the 2025 EIA Report Chapter 10: Hydrology, Geology and Peat, which should be read in conjunction with this document.

10.4 Scope of Assessment

10.4.1 Since publication of the 2025 EIA Report, the following changes to the revised development have been made:

- **Revised Option 2 Access Track Layout and Amendment to Turning Head Situated to the North of T15:** The alignment for the Option 2 access track route to T15 and the location of the turning head to the north of T15 as outlined in the 2025 EIA Report have been amended in response to consultation responses received from SEPA.
- **Revised Location of T3, T5 and Associated Access Tracks:** The position of Turbines 3 and 5 and associated access tracks linking the two as outlined in the 2025 EIA Report have been relocated downslope and to the east in order to reduce their overall height above ordnance datum. These changes have been made in response to consultation responses received from The Highland Council.

10.4.2 Where effects on features fully assessed in the 2025 EIA Report are not considered to be different for the revised development layout, these are scoped out of this FEI.

10.4.3 On this basis the following are considered to be potentially impacted differently by the revised development layout and are assessed further in this FEI chapter:

- Pollution Impact from Sediment Run-off / Transport and / or Chemical Contaminated Run-off;
- Removal and Impact on Peat; and
- Impact on the Integrity of Watercourse Banking; and
- Fluvial Geomorphology.

10.5 Baseline Conditions and Sensitivity Assessment

Designated Sites

10.5.1 The baseline and sensitivity assessment for designated sites remains as described within the 2025 EIA report and remains high.

Geology (including Soils)

- 10.5.2 The baseline and sensitivity assessment for underlying bedrock and mineral superficial deposits remain as described within the 2025 EIA report.
- 10.5.3 Additional Phase 2 peat probing works were undertaken in December 2025 and March 2026 to investigate areas of the site where additional information was considered to be required, primarily the area of the amended Option 2 access track route to T15, the area of the re-aligned turning head situated to the north of T15 and the new hardstanding areas for T3 and T5 and associated access track routes.
- 10.5.4 The pattern of peat probing undertaken during these works comprised the following:
- Probes advanced on a grid at approximate 25m centres within the area of the re-aligned Option 2 Access Track to T15 and the proposed location of the re-aligned turning head north of T15 (including 50m buffer areas);
 - Probes advanced on a grid at approximate 25m centres within the area of the new hardstanding areas for T3 and T5 (including 50m buffer areas); and
 - Probes advanced at 25 m centres along new access track routes as required.
- 10.5.5 The data obtained from these additional survey works were used in conjunction with the peat depth data obtained during previous phases of probing to plot the presence and distribution of peat across the revised development layout, create an updated peat contour plan, and feed into final detailed design. The data was also used to update the Outline Peat Landslide Risk Assessment (PLHRA) and Outline Peat Management Plan (PMP) reports prepared for the site; refer to Technical Appendices 10.2 and 10.3, respectively.
- 10.5.6 The data obtained from the additional peat probing works undertaken in December 2025 and March 2026 were noted to be consistent with the findings of the previous peat probing works, with some improvements noted in the area of T3, T5 and associated access tracks and the turning head located to the north of T15, where shallower peat deposits were generally recorded. The new alignment of the Option 2 access track to T15 was also noted to be located on shallower peat deposits and created a perpendicular water crossing at this point.
- 10.5.7 In light of the additional peat probing data the overall sensitivity of the baseline peat resources within the development area are considered to remain medium, given that peat deposits have been recorded across the site.

Hydrogeology

- 10.5.8 The baseline and sensitivity assessment for hydrogeology receptors including groundwater dependent terrestrial ecosystems (GWDTE) and private water supplies (PWS) remain as described within the 2025 EIA report and remains low.

Watercourses

- 10.5.9 The baseline and sensitivity assessment for watercourses remains as described within the 2025 EIA report and remains low.

Water Crossings

- 10.5.10 The baseline and sensitivity assessment for water crossings remains as described within the 2025 EIA report.

Borrow Pit Search Areas

- 10.5.11 The baseline and sensitivity assessment for borrow pit search areas remains as described within the 2025 EIA report.

Flooding

- 10.5.12 The baseline and sensitivity assessment for flooding remains as described within the 2025 EIA report and remains low.

Contaminated Land

- 10.5.13 The baseline and sensitivity assessment for contaminated land remains as described within the 2025 EIA report and are not considered further within this FEI report.

10.6 Impact Assessment

Identification and Evaluation of Key Effects

- 10.6.1 The Key Effects identified in the 2025 EIA report Chapter 10: Hydrology, Geology and Peat are considered to remain valid for this FEI and should be read in conjunction with this document.
- 10.6.2 No additional key effects have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat.

Mitigation Measures

- 10.6.3 The Mitigation Measures identified in the 2025 EIA report Chapter 10: Hydrology, Geology and Peat (Section 9.7) are considered to remain valid for this FEI and should be read in conjunction with this document.
- 10.6.4 Based on the updated development design and the additional baseline data that has been collected, no additional mitigation measures to those outlined within the 2025 EIA report Chapter 10: Hydrology, Geology and Peat are considered to be required.

Construction

Impact upon Designated Sites's

- 10.6.5 The residual construction impacts to designated sites are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.6 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **minor adverse** effect and not significant in EIA terms.

Pollution Impact from Sediment Run-off / Transport and / or Chemical Contaminated Run-off

- 10.6.7 The residual construction impacts from sediment run off / transport and / or chemical contaminated run off are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.8 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **negligible adverse** effect and not significant in EIA terms.

Pollution Impact from Forestry Felling

- 10.6.9 The residual construction impacts to surface watercourses from felling operations are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.10 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **negligible adverse** effect and not significant in EIA terms.

Changes to Groundwater Flow

- 10.6.11 The residual construction impacts to groundwater flow are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.12 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **negligible adverse** effect and not significant in EIA terms.

Removal of and Impact on Peat

- 10.6.13 The residual construction impacts to peat are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.14 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **minor adverse** effect and not significant in EIA terms.

Peat Landslide Impact on Watercourses

- 10.6.15 The residual construction impacts to watercourses from peat landslide are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.16 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **minor adverse** effect and not significant in EIA terms.

Impact on the Integrity of Banking

- 10.6.17 The residual construction impacts to watercourse banking are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.18 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **negligible adverse** effect and not significant in EIA terms.

Direct Discharge of Untreated Foul Drainage

- 10.6.19 The residual construction impacts to watercourses from peat landslide are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.20 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **negligible adverse** effect and not significant in EIA terms.

Operation

Surface Water Drainage

- 10.6.21 The residual operational impacts to watercourses from surface water drainage are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.22 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **negligible adverse** effect and not significant in EIA terms.

Fluvial Geomorphology

- 10.6.23 The residual operational impacts to fluvial geomorphology are considered to remain as described within the 2025 EIA report as long as the committed mitigation measures outlined with the 2025 EIA report are implemented.
- 10.6.24 No additional impacts have been identified as a result of the revised development layout and the additional baseline information that has been collected in relation to peat. As such, these are considered to remain of **negligible adverse** effect and not significant in EIA terms.

Cumulative Effects

- 10.6.25 Cumulative Effects are considered to remain consistent with those presented in the 2025 EIA Report Chapter 10: Hydrology, Geology and Peat, which should be read in conjunction with this document.

10.7 Summary

- 10.7.1 The additional peat probing surveys undertaken to assess peat condition and thickness within the footprint of the revised development layout has not resulted in any changes to the overall assessment findings. The assessment of significance of effects remains unchanged from that outlined within the 2025 EIA.

10.8 Statement of Significance

- 10.8.1 Effects on hydrology, geology and peat, associated with the revised Development are considered to be not significant. This represents no change to the conclusions outlined in the 2025 EIA Report.

10.9 References

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11 NOISE

Introduction

- 11.1 This chapter contains and updated assessment of noise of the Revised Development. It draws on the May 2025 EIAR Chapter 11: Noise. This chapter should be read in conjunction with these documents and associated Technical Appendices.

Noise Operational Effects

Predicted L90 Project Levels

- 11.1 The project layout has been updated to reflect changes from consultation with the Highland Council. Changes have been made to the location of T3 and T5. These two turbines have moved marginally further away of NALs 2 – 7 and marginally closer to NAL1. In addition, there have been a reduction in tip height for all turbines, from 250m to 200m for nine (9) turbines, and to 230m for six (6) turbines. The appropriate hub heights have been updated. All turbine coordinates are presented in **Table 11.1**.

Table 11.1: Proposed Development WTG Coordinates

Label	Previous Layout			Updated Layout		
	X	Y	Hub Height (m)	X	Y	Hub Height (m)
WTG 1	244618	925477	169	244618	925477	119
WTG 2	245231	925221	169	245231	925221	119
WTG 3	244691	924974	169	244725	925121	119
WTG 4	245132	924730	169	245132	924730	119
WTG 5	244915	924134	169	245035	924182	119
WTG 6	245231	923675	169	245231	923675	119
WTG 7	245874	923674	169	245874	923674	149
WTG 8	245319	923120	169	245319	923120	119
WTG 9	246111	923189	169	246111	923189	149
WTG 10	245584	922610	169	245584	922610	119
WTG 11	246327	922692	169	246327	922692	149
WTG 12	245741	922137	169	245741	922137	119
WTG 13	246560	922141	169	246560	922141	149
WTG 14	245910	921660	169	245910	921660	149
WTG 15	246439	921474	169	246439	921474	149

- 11.2 Line of sight visibility was checked between the turbines and each NAL at 4m height. Where a turbine is not visible from any particular assessment position (at 4m height) a -2dB

adjustment to the predicted level from the screened turbine(s) has been applied. The changes to location of T3 and T5, and the changes to tip height have introduced additional screening of NALs 2, 3, 4, 5, and 7. **Table 11.2** provides details of all corrections applied to each NAL.

Table 11.2: Topographic Corrections (dB)

NAL	NA L 1	NA L 2	NA L 3	NA L 4	NA L 5	NA L 6	NAL 7
Turbine ID	Coille Linne Wind Farm						
T1	0	-2	-2	-2	-2	-2	-2
T2	0	-2	-2	-2	-2	-2	-2
T3	0	0	0	-2	-2	-2	0
T4	0	0	0	0	-2	-2	-2
T5	0	0	0	0	0	0	-2
T6	0	0	0	0	0	0	-2
T7	0	0	0	0	0	0	-2
T8	0	0	0	0	0	0	0
T9	0	0	0	0	0	0	-2
T10	0	0	0	0	0	0	0
T11	0	0	0	0	0	0	0
T12	0	0	0	0	0	0	0
T13	-2	0	0	0	0	0	0
T14	0	0	0	0	0	0	0
T15	-2	0	0	0	0	0	0

11.3 The proposed candidate turbine for the noise impact assessment has remained as the Vestas V162 rated at 7.2MW. With a tip height reduction data has been updated for 119 m and 149 m. The turbine rotors would be fitted with Trailing Edge Serration (TES), a technology that reduces noise emissions. The sound power values have been obtained from the manufacturer's sound power report (Document no: 0114-3777 V03) dated 2022-07-01. Data is presented in **Table 11.3** and **Table 11.4**.

Table 11.3: Octave band sound power level for the V162 7.2MW (119m)

Octave Band (Hz)	V10 wind speed (ms ⁻¹)								
	4	5	6	7	8	9	10	11	12
	Sound Power Level [LWA] for a hub height of 119m [dB(A)]								
63	78.7	83.1	87.2	88.2	88.5	88.6	88.5	88.5	88.5
125	85.8	90.5	94.8	95.9	96.0	96.2	96.4	96.4	96.4
250	88.7	93.5	98.0	99.0	99.1	99.4	99.7	99.8	99.8
500	89.6	94.1	98.2	99.2	99.4	99.7	100.1	100.2	100.2
1000	88.2	92.5	96.5	97.6	97.7	98.1	98.6	98.7	98.7

2000	83.9	88.1	91.9	93.0	93.2	93.6	94.1	94.2	94.2
4000	76.6	80.6	84.3	85.3	85.6	86.1	86.5	86.6	86.6
8000	66.2	70.0	73.6	74.6	75.0	75.5	75.9	75.9	75.9
Total	94.9	99.4	103.6	104.6	104.8	105.1	105.4	105.5	105.5
Uncertainty	2	2	2	2	2	2	2	2	2
IoA Total	96.9	101.4	105.6	106.6	106.8	107.1	107.4	107.5	107.5

Table 11.4: Octave band sound power level for the V162 7.2MW (149m)

Octave Band (Hz)	V10 wind speed (ms ⁻¹)								
	4	5	6	7	8	9	10	11	12
	Sound Power Level [LWA] for a hub height of 149m [dB(A)]								
63	78.9	83.6	87.7	88.3	88.5	88.5	88.5	88.5	88.5
125	86.1	91.3	95.4	95.9	96.1	96.3	96.4	96.4	96.4
250	89.1	94.4	98.5	99.1	99.2	99.5	99.8	99.8	99.8
500	89.8	94.7	98.8	99.3	99.4	99.8	100.2	100.2	100.2
1000	88.5	93.1	97.1	97.6	97.8	98.2	98.7	98.7	98.7
2000	84.1	88.5	92.5	93.0	93.2	93.7	94.2	94.2	94.2
4000	76.8	80.9	84.8	85.4	85.7	86.3	86.6	86.6	86.6
8000	66.4	70.3	74.1	74.7	75.1	75.7	75.9	75.9	75.9
Total	95.1	100.1	104.1	104.7	104.8	105.2	105.5	105.5	105.5
Uncertainty	2	2	2	2	2	2	2	2	2
IoA Total	97.1	102.1	106.1	106.7	106.8	107.2	107.5	107.5	107.5

11.4 Predicted noise immissions from the Proposed Development that were reported in the EIA are presented in **Table 11.5**. Updated noise immission levels for the layout change are presented in **Table 11.6**.

Table 11.5: Previous Proposed Development immission levels

L90	dB(A)	V10 wind speed (ms ⁻¹)								
Location	Name	4	5	6	7	8	9	10	11	12
NAL1	Fiag Lodge	18.7	23.9	27.7	28.2	28.4	28.6	28.8	28.8	28.8
NAL2	East Overscaig	20.5	25.7	29.5	30.0	30.2	30.4	30.6	30.6	30.6
NAL3	Carrachin, Loch Shin	20.3	25.5	29.3	29.8	30.0	30.2	30.5	30.5	30.5
NAL4	Oak Lodge	19.0	24.1	28.0	28.5	28.7	28.9	29.1	29.1	29.1
NAL5	Overscaig Hotel	18.9	24.1	27.9	28.4	28.6	28.8	29.0	29.0	29.0
NAL6	Overscaig House	18.0	23.2	27.0	27.5	27.7	27.9	28.2	28.2	28.2
NAL7	Overscaig Bungalow	17.8	23.0	26.8	27.3	27.5	27.7	27.9	27.9	27.9

Table 11.6: Updated Proposed Development immission levels

L90	dB(A)	V10 wind speed (ms ⁻¹)								
Location	Name	4	5	6	7	8	9	10	11	12
NAL1	Fiag Lodge	18.4	23.1	27.3	28.3	28.4	28.7	28.9	28.9	28.9
NAL2	East Overscaig	20.0	24.7	29.0	29.8	30.0	30.2	30.5	30.5	30.5
NAL3	Carrachin, Loch Shin	19.8	24.6	28.8	29.7	29.8	30.1	30.4	30.4	30.4
NAL4	Oak Lodge	18.5	23.2	27.5	28.4	28.5	28.8	29.0	29.0	29.0
NAL5	Overscaig Hotel	18.2	23.0	27.2	28.1	28.3	28.5	28.8	28.8	28.8
NAL6	Overscaig House	17.6	22.4	26.6	27.5	27.6	27.9	28.1	28.1	28.1
NAL7	Overscaig Bungalow	17.3	22.1	26.3	27.2	27.4	27.6	27.9	27.9	27.9

11.5 The level differences from the updated assessment are presented in **Table 11.7**.

Table 11.7: Assessment Level Difference

L90	dB(A)	V10 wind speed (ms ⁻¹)								
Location	Name	4	5	6	7	8	9	10	11	12
NAL1	Fiag Lodge	-0.3	-0.8	-0.4	0.1	0.0	0.1	0.1	0.1	0.1
NAL2	East Overscaig	-0.5	-1.0	-0.5	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
NAL3	Carrachin, Loch Shin	-0.5	-0.9	-0.5	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
NAL4	Oak Lodge	-0.5	-0.9	-0.5	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
NAL5	Overscaig Hotel	-0.7	-1.1	-0.7	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2
NAL6	Overscaig House	-0.4	-0.8	-0.4	0.0	-0.1	0.0	-0.1	-0.1	-0.1
NAL7	Overscaig Bungalow	-0.5	-0.9	-0.5	-0.1	-0.1	-0.1	0.0	0.0	0.0

Summary

- 11.6 The noise levels have changed by a low to negligible amount and overall receive a net reduction from the change in layout and tip height reduction. This result suggests that noise impacts would remain **negligible** and **not significant**.
- 11.7 Since the submission of the NIA, updated noise guidance has been published in June 2026. The document provides updated technical guidance for assessing and controlling operational noise from wind turbines and replaces the previous ETSU-R-97 document.
- 11.8 While the new guidance supersedes ETSU-R-97, the fundamental framework of the assessment remains unchanged. The submitted NIA presents a detailed cumulative assessment that considers consented and apportioned limits from both the Proposed Development and third-party developments. Additionally, detailed consultation was

carried out with Environmental Health to agree the lower limit value applicable in the assessment. As such, application of the new guidance would not materially change the reported outcomes of the noise impact assessment.

12 TRAFFIC & TRANSPORT

Introduction

- 12.1 This FEI chapter considers any likely significant effects of the Revised Development on traffic and transportation. It draws upon Chapter 12: Traffic & Transport of the EIAR and this section of the FEI should be read in conjunction with the EIAR and the associated Technical Appendices.
- 12.2 The layout proposed by the Revised Development remains largely the same as that of the Proposed Development but with a reduction in the proposed tip height of all turbines and the relocation of turbine 3 and turbine 5.

Key Conclusions of the EIA

- 12.3 The EIAR considered the transportation effects associated with the Proposed Development, with the construction phase considered the main focus as this is when the majority of traffic movements will be generated. The assessment was based on a 'worst-case' scenario that all stone and aggregate will be imported to the site.
- 12.4 The assessment within the EIAR concluded that the impacts prior to mitigation were negligible at worst. Therefore, mitigation was not necessary. However, it is good practice to prepare a Construction Management Plan to control traffic and transport activities during the life of the Proposed Development. An Outline CTMP was broadly set out in Section 12.67 of the EIAR and will be developed further in due course and in collaboration with THC.

Consultation

- 12.5 A summary of the consultation responses received that are relevant to this section of the FEI are presented in Table 12.1 below, reiterating the information presented in Table 3.1.

Table 12.1: Consultation Responses relevant to Traffic & Transport

Topic	Consultee	Status	Comment	Action Taken / Where Addressed within this FEI
Traffic & Transport	Transport Planning	No objection	Conditions suggested	No further action required
	Transport Scotland	No Objection	Conditions Suggested	No further action required

Assessment of Effects Update

- 12.6 Given that the Revised Development will not impact the component, abnormal and HGV traffic numbers associated with the development it is considered that the conclusions presented in the EIAR remain valid and applicable. On a 'worst case' basis the Revised Development will have a negligible and not significant effect on the traffic volumes

associated with the development and no significant impacts are anticipated for any phase of the Revised Development.

13 SOCIOECONOMICS & TOURISM

Introduction

- 13.1 This chapter addresses the likely significant effects of the Further Revised Development on Socio Economics. It draws on the May 2025 EIAR Chapter 13: Socio Economics & Tourism. This chapter should be read in conjunction with these documents and associated Technical Appendices.

Assessment of Effects Update

- 13.2 Overall, the effect is predicted to remain as set out in the 2025 EIAR as minor beneficial effects. In terms of the operation and maintenance phase, the effects will also remain unchanged and are considered minor beneficial as a result of the various wider economic benefits which will accrue at the local level, as presented in the preceding section.
- 13.3 Similarly, the tourism and recreation effects at the construction and operation phases will at worst, be the same as the 2025 EIAR and are considered to be negligible in nature. Local tourism and recreation assets and activities are likely to benefit from the community benefits package and therefore potential effects on tourism and recreation will not be adverse and will remain positive but negligible. More detail on the conclusions are contained with the 2025 EIAR and remain unchanged for the Revised Development.

14 FORESTRY

Introduction

- 14.1 This chapter considers the potential effects of Coille Linne Wind Farm, the 'proposed development,' on forestry.
- 14.2 This chapter is also supported by the following figures as contained within EIA Report Volume 2: Figures:
- Figure 14.1: Baseline Forestry
 - Figure 14.2: With Wind Farm Felling
 - Figure 14.3: With Wind Farm Replanting
- 14.3 The chapter is supported by a number of Technical Appendices (as set out within Volume 4: Technical Appendices), comprising:
- Technical Appendix 14.1: Forest Data
 - Technical Appendix 14.2: Photographic Records
- 14.4 Other relevant chapters include
- Chapter 3: Project Description;
 - Chapter 6: Landscape and Visual;
 - Chapter 8: Ecology; and
 - Chapter 10: Geology, Hydrology and Hydrogeology.
- 14.5 The author of this Chapter, Neil McKay MICFor, is a chartered forester, a professional member of the Institute of Chartered Foresters since 1994. Neil McKay has more than 12 years of relevant experience in the preparation of Forestry Chapters as part of EIA Reports for a range of wind farms across Scotland.

Legislation, Policy and Guidance

Legislation

- 14.6 The scope of the assessment has been informed by consultation responses summarised in Table 14.1 and the following guidelines/policies:
- Forestry and Land Management (Scotland) Act 2018.
 - Forestry Commission Scotland (2009). The Scottish Government's Policy on Control of Woodland Removal, Edinburgh.
 - The Scottish Government (2019) Scotland's Forestry Strategy 2019-2029. Edinburgh.
 - The Scottish Government (2011). Scottish Land Use Strategy. Edinburgh.

- The Scottish Government (2014a). Scotland's Third National Planning Framework (NPF3). Edinburgh.
- The Scottish Government (2014b). Scottish Planning Policy. Edinburgh.

Policy

14.7 Chapter 5: Renewable Energy and Planning Policy of the EIA Report sets out the planning policy framework that is relevant to the EIA process and the proposed development. The policies set out include those from The Highland Council, Highland-wide Local Development Plan (HwLDP)(2012), relevant aspects of The Scottish Government (2023) Scotland's Fourth National Planning Framework (NPF4), Planning Advice Notes and other relevant guidance.

14.8 Key plans and policies include:

- The Scottish Government (2023) Scotland's Fourth National Planning Framework (NPF4)
- Forestry Commission Scotland (2009) The Scottish Government's Policy on Control of Woodland Removal, Edinburgh.

Guidance

The following guidance has been considered within the assessment Forestry Commission Scotland (2019) Scottish Government's policy on control of woodland removal: implementation guidance;

- Forestry Commission Scotland (2019): Scottish Government's policy on control of woodland removal: implementation guidance February 2019
- Forest Research (2023): The UK Forestry Standard Guidelines. Farnham.
 - Forests and Biodiversity;
 - Forests and Climate Change;
 - Forests and Historic Environment;
 - Forests and Landscape;
 - Forests and People;
 - Forests and Soil; and
 - Forests and Water.
- The Highland Council, Highland Forest and Woodland Strategy (November 2018)
- The Highland Council, Trees, woodlands and development supplementary guidance (January 2013)
- SEPA (2017) SEPA Guidance Notes WST-G-027 Management of Forestry Waste; and
- SEPA (2014) LUPS-GU27 Use of Trees Cleared to Facilitate Development of Afforested Land.
- UKWAS (2012) The UK Woodland Assurance Standard, Third Edition, UKWAS, Edinburgh.

Consultation

- 14.9 As part of the Scoping exercise, a consultation exercise was undertaken to inform the design of the proposed development and to seek agreement on potential significant environmental effects that result from the proposed development as well as the scope of any assessment work required as part of this EIA.
- 14.10 The Scoping Opinion was received from [Local Authority or ECU/ Scottish Ministers] on 20 September 2024.
- 14.11 Consultation relevant to the forestry assessment was undertaken with The Highland Council, Scottish Forestry and Scottish Environment Protection Agency who commented on aspects of methodology, sources of information, scope of assessment and cumulative development. A summary of these consultation responses is provided in Table 14.1.

Table 14.1: Consultation Responses

Consultee	Date Received	Consultation Response	Where and how is this addressed?
The Highland Council (THC)	20 September 2024	A specific chapter on Forestry is required as the layout of the access road, turbines or associated infrastructure will impact on Forestry. The EIAR should provide a baseline survey of the plants including fungi, lichens and bryophytes and trees present on the site to determine the presence of any rare or threatened species. The EIAR should indicate areas of woodland / forestry plantation which may be felled to accommodate new development (including the access), including any off-site works / mitigation. Compensatory planting of new woodland is a clear expectation of any proposals for felling, and thereby such mitigation needs to be considered within any assessment. If trees are removed, then compliance with the Scottish Government's Control of Woodland Removal Policy must be demonstrated.	This forestry chapter addresses the impact on Forestry. The baseline survey of plants including fungi, lichens and bryophytes are dealt with in the Ecology Chapter.
Scottish Forestry	20 September 2024	Woodland removal with a need for compensatory planting - Design approaches that reduce the scale of felling	Design has sought to reduce the impact of felling for the infrastructure with a keyhole approach where possible.

Consultee	Date Received	Consultation Response	Where and how is this addressed?
		required and/or converting the type of woodland to another type (such as from tall conifer plantation to low-height, slow growing woodland), must be considered from the earliest stages, rather than removing the woodland completely. The purpose of any required CP is to secure, through new woodland on site replanting) or off site (on appropriate sites elsewhere), at least the equivalent woodland-related net public benefit embodied in the woodland to be removed.	Compensatory Planting has been addressed with the Applicant committed to provide at least the equivalent woodland-related net public benefit within any new woodland.
		National Planning Framework 4 - Policy 6 Forestry, Woodlands and trees identifies several themes that should be considered relevant to this application – <i>b) Development proposals will not be supported where they will result in:</i> <i>iii. Fragmenting or severing woodland habitats, unless appropriate mitigation measures are identified and implemented in line with the mitigation hierarchy;</i> <i>c) Development proposals involving woodland removal will only be supported where they will achieve significant and clearly defined additional public benefits in accordance with relevant Scottish Government policy on woodland removal. Where woodland is removed, compensatory planting will most likely be expected to be delivered.</i> <i>d) Development proposals on sites which include an area of existing woodland or land identified in the Forestry and Woodland Strategy as being suitable for woodland creation will only be supported where the</i>	As above the design has sought to minimise woodland loss. The proposed development would help to meet the Scottish Government's Policy for Renewable and Low Carbon Energy. As above, the chapter follows the Scottish Government policy on woodland removal.

Consultee	Date Received	Consultation Response	Where and how is this addressed?
		<i>enhancement and improvement of woodlands and the planting of new trees on the site (in accordance with the Forestry and Woodland Strategy) are integrated into the design.</i>	
Scottish Environment Protection Agency (SEPA)	20 September 2024	Forest removal and forest waste 6.1 If forestry is present on the site, the site layout should be designed to avoid large scale felling, as this can result in large amounts of waste material and a peak in release of nutrients which can affect local water quality. 6.2 The submission must include drawings with the boundaries of where felling will take place and a description of what is proposed for this timber in accordance with Use of Trees Cleared to Facilitate Development on Afforested Land – Joint Guidance from SEPA, SNH and FCS.	The design has minimised the felling required for construction. Nutrient release would be controlled through good forestry practice addressed through the Construction Environmental Management Plan (CEMP).

Assessment Methodology and Significance

Scope of Assessment

- 14.12 Forestry planning and operations within the United Kingdom are required to follow the UK Forestry Standards (UKFS).
- 14.13 Scottish Forestry is the Scottish Government agency responsible for forestry policy, support and regulation. They were established as an Executive Agency of the Scottish Government on 1 April 2019, following full devolution of forestry to the Scottish Parliament as a result of the Forestry and Land Management (Scotland) Act 2018 ('the Act'). The Act provides the legal basis for the regulation of forestry in Scotland, and includes the requirement to be in possession of a Felling Permission to fell trees.
- 14.14 The Forestry (Exemptions) (Scotland) Regulations 2019 and The Felling (Scotland) Regulations 2019 include further detailed provisions about the operations of Felling Permission procedures. Included in these exceptions is where the felling is immediately required for the purposes of carrying out development granted by planning permission. This only applies where there is approved planning consent. 'Outline planning',

'preplanning' or 'planning in principle' are not exempt as no formal approval has been given for these.

14.15 The Scottish Government's Policy on Control of Woodland Removal (2009) defines woodland removal as the permanent removal of woodland for the conversion to another type of land use. This policy is supported by Scottish Government's policy on control of woodland removal: implementation guidance (2019).

14.16 This chapter identifies the potential effects on forestry associated with the impacts of the construction and operation of the proposed development. Where required, it also provides details of additional mitigation measures to address the potential impacts.

14.17 The technical scope of the assessment has identified potential impacts and effects of the proposed development on the following likely sensitive forestry receptors during construction and operation:

- Coniferous plantation woodland;
- Loss of woodland / feature to facilitate the construction of the proposed development; and
- Permanent loss of woodland associated with the completed development stage of the proposed development.

14.18 The assessment also considered the requirement for replanting in situ and/ or for compensatory planting off-site.

Effects Assessed in Full

14.19 The following effects were considered to be potentially significant and have been assessed in full within this chapter:

- The total forest cover within the Site and
- The changes to the forest structure within the Site.

Effects Scoped Out

14.20 Secondary effects resulting from forestry activities, including effects on habitats and species, ornithology, hydrology and landscape and visual effects, are considered within their respective chapters of this EIA Report and are not included within this Chapter.

Cumulative Effects

14.21 On the basis that the overall forest resource will be maintained across the board in line with CoWRP and UKFS, then no cumulative effects are anticipated.

Study Area

14.22 The forestry study area includes all the forest area within the Site is noted in Figure 14.1 Baseline Forestry.

Desk Based Study and Data Sources

- 14.23 The forest study area is part of the Overscaig forest complex. The forest areas as described in the Scottish Forestry Map Viewer as detailed in Table 14.2.

Table 14.2 Forests within the Forestry Study Area

Property Number	Forest name	National Grid Reference	Area (ha)
30000562	Betty's Wood	NC466204	91.60
30000561	Coille A Druim	NC458217	65.8
30000570	Grants Wood	NC464221	55.50
30000571	Fiag A' Tuath	NC461227	56.10
30000569	Coille Linne	NC457232	77.80
30000566	Meall Odhar	NC454239	49.10
30000568	Strath Duchally	NC453245	122.50

- 14.24 Forest data has been provided by the forest owner and agents for an area collectively known as Fiag Siar which includes Grants Wood, Fiag A' Tuath, Coille Linne, Meall Odhar and Strath Duchally. Betty's Wood and Coille A Druim rely on aerial imagery and field survey and National Forest Inventory Open Data.
- 14.25 Ancient Woodland Inventory, Scotland (AWI) and Native Woodland Survey of Scotland Open Data show no ancient or native woodlands within the Site.

Field Survey

- 14.26 A field survey of the Forestry Study Area was undertaken on 8th November 2024. The field survey undertaken acts as ground truthing against the compartment maps supplied. Visual assessment of tree height and vigour was carried out. Example photographic records are provided in Technical Appendix 14.2.
- 14.27 Tree heights recorded are from 8.0m to 17.5m and are summarised by turbine location in Table 14.3.

Table 14.3 Tree Height by Turbine Location

Turbine	Easting	Northing	Tree height (m)
1	244618	925477	13.0
2	245231	925221	14.0
3	244691	924974	13.0
4	245132	924730	14.0
5	244915	924134	17.5
6	245231	923675	16.0
7	245874	923674	11.0
8	245319	923120	13.5

Turbine	Easting	Northing	Tree height (m)
9	246111	923189	8.0
10	245584	922610	10.0
11	246327	922692	14.0
12	245741	922137	16.5
13	246560	922141	13.5
14	245910	921660	16.5
15	246439	921474	13.5

Assessment of Significance

Sensitivity

- 14.28 There is no standard approach to the sensitivity of forestry. However, guidance has been taken from the CoWRP and NPF4 Policy 6.
- 14.29 The sensitivity of receptors has been classified as low, medium or high, in accordance with the criteria set out in Table 14.4.
- 14.30 Scottish Government's policy on control of woodland removal: implementation guidance sets out the following guiding principles of the policy.
- There is a strong presumption in favour of protecting Scotland's woodland resources. The first consideration for all woodland removal decisions should be whether the underlying purpose of the proposals can reasonably be met without resorting to woodland removal.
 - Woodland removal should be allowed only where it would achieve significant and clearly defined additional public benefits. In appropriate cases a proposal for compensatory planting may form part of this balance. The removal of large areas of woodland will not be supported and all felling proposals must be compliant with the UKFS.
 - Approval for woodland removal should be conditional on the undertaking of actions to ensure full delivery of the defined additional public benefits.
 - Planning conditions and agreements are used to mitigate the environmental impacts arising from development and Scottish Forestry (Scottish Government Forestry Regulator) will also encourage their application to development-related woodland removal.
 - Where felling is permitted but woodland removal is not supported, conditions conducive to woodland regeneration should be maintained through adherence to good forestry practice as defined in the UK Forestry Standard.
- 14.31 NPF4, Policy 6: Trees, Woodland and Forestry generally reflects Control of Woodland Removal Policy. This includes the following:
- a) Development proposals that enhance, expand and improve woodland and tree cover will be supported.

b) Development proposals should not be supported where they would result in:

- any loss of ancient woodlands, ancient and veteran trees, or adverse impact on their ecological condition;
- adverse impacts on native woodlands, hedgerows and individual trees of high biodiversity value or identified for protection in the Forestry and Woodland Strategy;
- fragmenting or severing woodland habitats, unless mitigation measures are identified and implemented;
- conflict with Restocking Direction, Remedial Notice or Registered Notice to Comply issued by the Scottish Forestry; and

c) Development proposals involving woodland removal should only be permitted where it would achieve significant and clearly defined additional public benefits. Where woodland is removed in association with development, developers will generally be expected to provide compensatory planting.

Table 14.4: Sensitivity Criteria

Sensitivity	Definition and Examples
<i>Very High</i>	<i>Felling and permanent woodland removal on AWI designations and semi natural woodlands</i>
<i>High</i>	Felling and permanent woodland removal on plantations on ancient woodland sites (PAWS) and NWSS
<i>Medium</i>	Felling and permanent woodland loss of productive conifer plantation or recently planted native woodlands
<i>Low</i>	Unplanted areas within forest land

Magnitude

- 14.32 The criteria for assessing the magnitude of change for the forestry activities associated with the proposed development is the measurement or scale of felling required, both temporary which will be replanted and that which will be permanent woodland loss to forests or woodlands. Permanent woodland loss will be compensated for elsewhere following CoWRP and should also be considered temporary in a Scottish forestry context.

Table 14.5: Magnitude of Effect

Magnitude	Criteria
Major	Large scale woodland removal. Felling without replanting
Moderate	Large scale felling with replanting
Minor	Scale of permanent felling in keeping with scale of forest landscape
Negligible	Scale of temporary felling with replanting in keeping with scale of forest landscape

- 14.33 Felling for the proposed development of 258.71ha is large scale but with replanting is a **Moderate** magnitude of effect.

Significance of Effects

14.34 The criteria for assessing sensitivity follows the CoWRP 2019 Guidance:

- Very High - The removal of large areas of woodland will not be supported
- High - Woodlands with a strong presumption against removal: Annex 2 CoWRP Guidance

14.35 While the initial felling of 258.71ha of woodland is considered high, however the permanent woodland loss of 37.36ha within this woodland would be **Minor**.

Table 14.6: Significance of Effects Matrix

Magnitude	Sensitivity			
	Very High	High	Medium	Low
Major	Major	Major	Major	Major
Moderate	Major	Moderate	Moderate	Moderate
Minor	Moderate	Moderate	Minor	Minor
None	Moderate	Moderate	Minor	Minor

Assumptions and Limitations

14.36 The woodland information is provided by the forest owner and agent for part of the forestry study area only. Other woodland information is based on open data.

Baseline Conditions

14.37 The mixed conifer plantation was mainly planted from 1982 to 1985 with smaller areas planted in 1986 through to 2016. The species are Sitka spruce (*Picea sitchensis*) and Lodgepole pine (*Pinus contorta*) which are predominantly planted in mixture. A small proportion of the area is planted as purely Sitka spruce and purely Lodgepole pine. A very small amount, 1.01ha, of other mixed conifers are planted. There are only small elements of native broadleaved areas with the most present, mainly birch (*Betula spp.*), at the public roadside frontage, 0.58ha.

14.38 Planting year and area for the Fiag Siar woodlands are as Table 14.7

Table 14.7 Fiag Siar Planting Year and Area.

Planting Year	Area (ha)
1982	70.85
1983	68.99
1984	76.07
1985	24.53
1986	4.20
1989	14.12

Planting Year	Area (ha)
1990	17.41
2014	0.56
2016	0.45
<i>Unplanted</i>	159.81
<i>Total</i>	497.78

- 14.39 The other woodlands are of the same species and main 1980's planting years. From NFI and site survey these contain 242.25 ha mixed conifer with 0.58 ha of native broadleaved species.
- 14.40 The total woodland area within the forestry study area is therefore 527.43ha. The summary forest data is provided in the Technical Appendix 14.1: Forest data.
- 14.41 The planted area is overall well stocked (the number of trees per hectare) and with an average Yield Class 14 is not untypical of the location. There are, however, a few areas on the western planted edge that have failed or are low stocking. The areas of Sitka spruce planted as a single species has a clear lower growth performance than where it is planted in mixture with Lodgepole pine.
- 14.42 The plantation is well compartmentalised with forest rides, many of which follow the watercourses flowing west to east into Glen Fiag. There is one existing forest road from near Fiag Bridge and through most of the planted area.
- 14.43 No timber harvesting has taken place to date although expired felling permissions are noted through the Scottish Forestry Map Viewer. No other approved Forest Plans are noted.

Identification and Evaluation of Key Effects

Construction Effects

- 14.44 Areas of woodland will need to be cleared for the construction and operation of the wind farm, including access tracks, turbine locations and other infrastructure which includes battery storage and a substation. However, due to the age and current tree height most infrastructure felling will require felling broader areas to a wind farm boundary in anticipation of windblow. Replanting of these additional "management felling areas" would take place to closer to the infrastructure which would remain as a keyhole. The exception to this would be the compartment surrounding T9 which is one of the poorer performing plantation areas. In this latter case it would be possible to fell to a keyhole design. The felling is summarised in Table 14.8 and Figure 14.2.
- 14.45 Due to the turbine specifications, specifically the clearance from the blade tip to the maximum tree height attained throughout the lifespan of the proposed development, there is no requirement for the further clearance of trees for bat mitigation. This follows the NatureScot guidance, Bats and onshore wind turbines - survey, assessment and mitigation.

- 14.46 An offset of 10 m has been applied to all infrastructure which is included in the permanent woodland loss and excluded from the replanting plan.
- 14.47 A total of 258.71 ha would require felling for the construction of the proposed development. Although these forest crops have not yet attained full maturity they are, for the most part, of a size and quality presentable as forest products. This would release some 95,840 tonnes of forest products which would be available for the Highland Region timber processors or further afield depending on market opportunities at the time.
- 14.48 It is not anticipated that any tree felling would fall into the category of forest waste as described in Use of Trees Cleared to Facilitate Development on Afforested Land – Joint Guidance from SEPA, SNH and FCS.
- 14.49 As stated, replanting of areas felled as management felling would be replanted in situ with mainly mixed conifers but allowing the whole forest to be restructured to the current UK Forestry Standards in terms of species choice and open ground. This would include the temporary compound and amount to a total area 221.35 ha replanting in situ. There would be a permanent loss of 37.36ha arising from the permanent infrastructure and standoff distances required for operational and safety reasons. All replanting and wind farm open ground is shown in Figure 14.3.

Table 14.8 Summary of Felling and Replanting by Area.

Description	Area (ha)
Total felling	258.71
Management felling (to be replanted in situ)	221.35
Permanent woodland loss	37.36

Operational Effects

- 14.50 As part of the proposed development, the area of woodland lost would be replanted off-site in accordance with the implementation guidance to CoWRP. The new woodland would be to at least the area of woodland lost resultant from the proposed development. The new woodland would meet the requirements of UKFS.
- 14.51 The Applicant is committed to providing suitable compensatory planting at a location yet to be determined. The compensatory planting arrangements would be agreed with Scottish Forestry and THC prior to commencement of the construction stage.

Decommissioning Effects

Mitigation Measures and Monitoring

Construction

- 14.52 The proposed development requires clearing of mainly conifer trees for the turbine infrastructure, access and operational and safety stand-off distances.
- 14.53 There are no designated woodlands within the Site.

- 14.54 The scoping opinion from The Highland Council and Scottish Forestry refers to Scottish Government's Control of Woodland Removal Policy and other relevant guidance. This recognises that, where woodland removal is required to enable the proposed development, it is expected to be with minimal woodland removal. The guidance advises that the proposed development falls into the category of woodland removal with a need for compensatory planting.

Compensatory planting is calculated in accordance with Annex 5 of the Scottish Government's Policy on Control of Woodland Removal: Implementation Guidance February 2019. Accordingly, compensatory planting arrangements shall be provided for at least 37.36 ha of woodland.

Table 14.9 Summary of Compensatory Planting

All Woodlands	Permanent tree clearance for construction (ha)	Compensatory planting (ha)
Total	37.36	37.36

- 14.55 Monitoring of forest operations during construction shall be required to ensure compliance with good forestry practice during the removal and planting operations.

Operation

- 14.56 Any forestry activities ongoing during operation of the wind farm, such as planting and maintenance will require no mitigation required for forestry or woodland other than following the UKFS guidelines.
- 14.57 Similarly, the maintenance of the compensatory planting would follow UKFS guidance.

Decommissioning

- 14.58 The above controls will be required should any of the decommissioned Site be replanted.

Cumulative Effects

- 14.59 Since plantation forests and woodlands are typically rotational, a cycle of felling and replanting would occur, as governed through the Forestry and Land Management (Scotland) Act 2018 and/ or the Scottish Government's Policy on Control of Woodland Removal. Therefore, there is no net loss of woodland and as such cumulative effects have not been considered in this assessment.

Residual Effects

Construction

- 14.60 The residual construction effects on forestry are a reduction of planted ground within each forest unit, in total by 37.36ha. However, when considering the proposed mitigation measures, including compensatory planting, the overall magnitude of impact would be negligible and there would be **no likely significant effect**.

Operation

- 14.61 There are no residual adverse operational effects on forestry. As no additional mitigation would be required, the residual completed development effects remain as reported in the assessment of effects section.

Decommissioning

- 14.62 There are no residual adverse decommissioning effects on forestry.

Summary

- 14.63 The total forestry study area extends to 527.43ha of mainly coniferous plantation.
- 14.64 The total felling area for construction including management felling to wind farm boundaries is 258.71ha and a total of 221.35ha of the area felled would be replanted in situ.
- 14.65 As a result of the woodland permanently removed for the turbine infrastructure including tracks and operational and safety stand-off distances, a net woodland loss of 37.36ha would occur. In the absence of mitigation, the effect would be **moderate and not significant**.
- 14.66 In order to comply with the Scottish Government's Control of Woodland Removal Policy, compensation planting would be required to mitigate the loss of woodland area. The Applicant is committed to providing appropriate compensatory planting of 37.36ha. The extent, location and composition of such planting would be agreed with Scottish Forestry.
- 14.67 Following completion of the compensatory planting, the effect of woodland loss is not significant.

Table 14:10 Summary of Potential Significant Effects of the Proposed Development

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome
Construction			
Permanent woodland loss	Compensatory planting will be provided, calculated in accordance with Annex 5 of the Scottish Government's policy on control of woodland removal: implementation guidance February 2019.	Planning Condition requiring scope of compensatory planting to be agreed	Not significant
Increased harvesting with risk to water quality	None required All forestry operations must maintain good practice. The CEMP will incorporate good practice from the 2 nd edition Forestry and Water Scotland guidelines in	Planning Condition requiring scope of CEMP to be agreed	Not significant

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome
	relation to working around watercourses, including connected ditches and drains.		
Operation			
No significant effect	None	N/A	Not significant
Decommissioning			
No significant effect	None	N/A	Not significant
Cumulative Construction			
Not relevant to forestry	None	N/A	Not Relevant/Applicable
Cumulative Operation			
Not relevant to forestry	None	N/A	Not Relevant/Applicable

References

The Scottish Government (2019). Scotland's Forestry Strategy 2019-2029. Edinburgh

The Scottish Government (2016) A Land Use Strategy for Scotland 2016-2021. Edinburgh

The Scottish Government (2023) Fourth National Planning Framework (NPF4). Edinburgh

The Scottish Government (2009) The Scottish Government's Policy on Control of Woodland Removal. Edinburgh

Forest Research (2023) UK Forestry Standard (UKFS). Farnborough

The Scottish Government (2018) Forestry and Land Management (Scotland) Act 2018

SEPA (2014) Use of Trees Cleared to Facilitate Development on Afforested Land. Joint Guidance from SEPA, SNH and FCS

Scottish Natural Heritage (2019) Bats and Onshore Wind Turbines: Survey, Assessment and Mitigation. Joint Guidance

The Highland Council, Highland Forest and Woodland Strategy (November 2018)

The Highland Council, Trees, woodlands and development supplementary guidance (January 2013)

15 OTHER ISSUES

Introduction

- 14.68 This section of the FEI addresses the potential for significant effects to occur on receptors including infrastructure, aviation, health and safety, telecommunications and shadow flicker as a result of the Revised Development.
- 14.69 It draws upon Chapter 14: Other Issues of the EIAR and this section of the FEI should be read in conjunction with the EIAR and the associated Technical Appendices.
- 14.70 The layout proposed by the Revised Development sees the reduction in tip height of all turbines from 250m to a mix of 200/230m to blade tip. Turbines 3 and 5 have been relocated slightly, with all other turbine locations remaining unchanged (please refer to Chapter 3 of this Written Statement for further details).

Key Conclusions of the EIAR

- 14.71 Chapter 13 of the EIAR assessed the potential impacts of the Proposed Development on a variety of 'other issues', including health and safety, telecommunications and television, aviation and radar, shadow flicker and climate change mitigation and adaptation.
- 14.72 No significant effects were predicted on any of the receptors assessed within the EIAR, although further consultation with Highlands and Islands Airports Limited ('HIAL') was suggested to share radar modelling results.

Consultation

- 14.73 A summary of the consultation responses received that are relevant to this section of the FEI are presented in Table 11.1 below, reiterating the information presented in Table 3.1.

Table 11.1: Consultation Responses relevant to Other Issues

Topic	Consultee	Status	Comment	Action Taken / Where Addressed within this FEI
Aviation	MOD	No objection	Approval of aviation lighting scheme prior to construction.	No further action required.

Assessment of Effects Update

Health and Safety (including human health, major accidents and disasters)

- 14.74 In relation to the potential effect of health and safety, the conclusions remain unchanged from those presented in the EIAR and no significant effects are anticipated as a result of the Revised Development. The Revised Development will be constructed and operated in accordance with all relevant UK health & safety legislation to ensure any risks to public safety are minimised.

Telecommunications and Television

- 14.75 The potential for negative effects on domestic television reception are greatly diminished post digital switchover, which took place throughout the UK in 2012. As such no significant effects are anticipated as detailed in the EIAR.
- 14.76 In the unlikely event that television signals are affected by the Revised Development, appropriate mitigation measures will be considered and implemented by the Applicant.

Aviation and Radar

- 14.77 Wind turbines have the ability to reflect radio waves and therefore have the potential to interfere with radar systems. The aviation interests remain unchanged from those assessed within the EIAR.
- 14.78 Given that the Revised Development has not changed substantially from the layout introduced by the Proposed Development it is therefore considered that the conclusions regarding aviation in the EIAR and discussed further with specific consultees remain unchanged and no significant effects are anticipated.

Shadow Flicker

- 14.79 No residential properties or other buildings are located within the area that could be affected by shadow flicker.
- 14.80 It is therefore considered that the conclusions regarding shadow flicker reported in the EIAR remain unchanged and with no significant effects predicted.